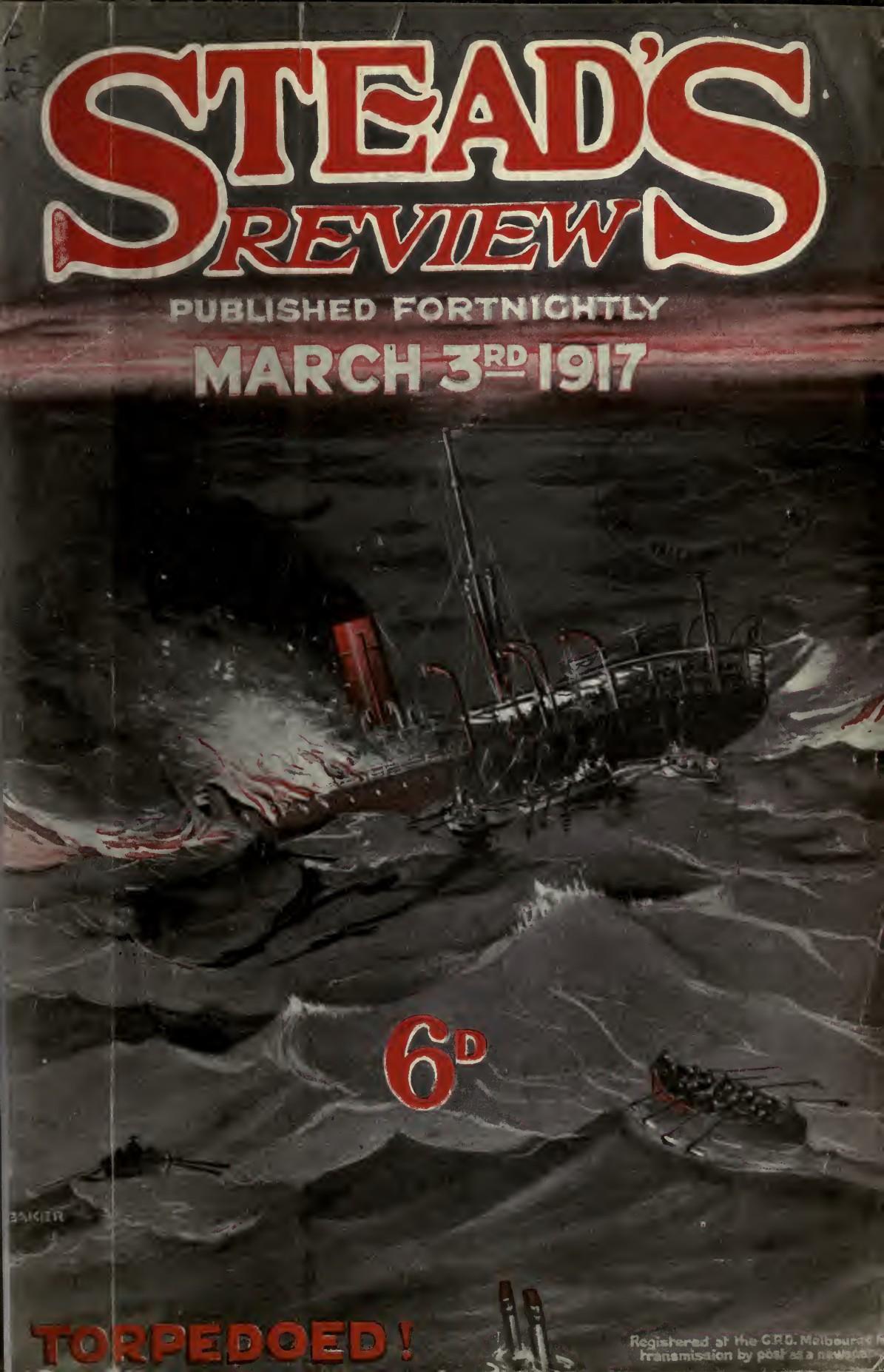


STEAD'S REVIEW

PUBLISHED FORTNIGHTLY

MARCH 3RD 1917



6^D

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I am glad I studied the Pelman Course. It has greatly improved my memory. It has helped me to keep my ears and eyes open, to think and reason, and especially to concentrate upon the work I'm doing.

Mental Wealth.

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If lodged after 8th March and on or before 2nd APRIL, 1917, interest at the rate of £1/10/- per cent. will be paid on 15th JUNE, 1917.

INSTALMENT APPLICATIONS.—If deposit and first instalment paid on or before 8th MARCH, 1917, interest at £3/14/- per cent. will be paid on 15th DECEMBER, 1917.

If deposit, first and second instalments are paid after 8th March, but on or before 2nd APRIL, 1917, interest at £3/12/- per cent. will be paid on 15th DECEMBER, 1917.

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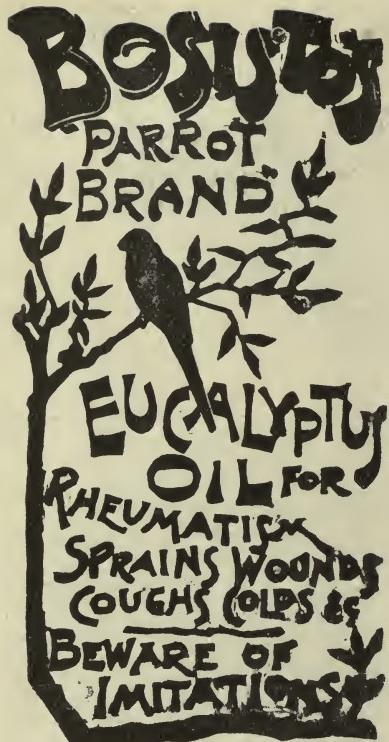
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STEAD'S REVIEW

OF REVIEWS.

EDITED BY HENRY STEAD
— AND OTHERS.

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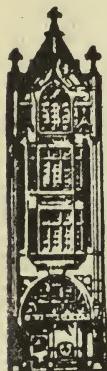
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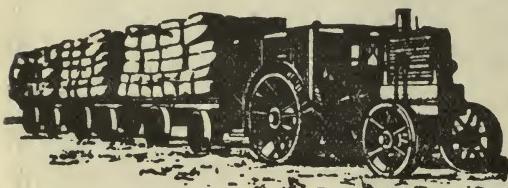
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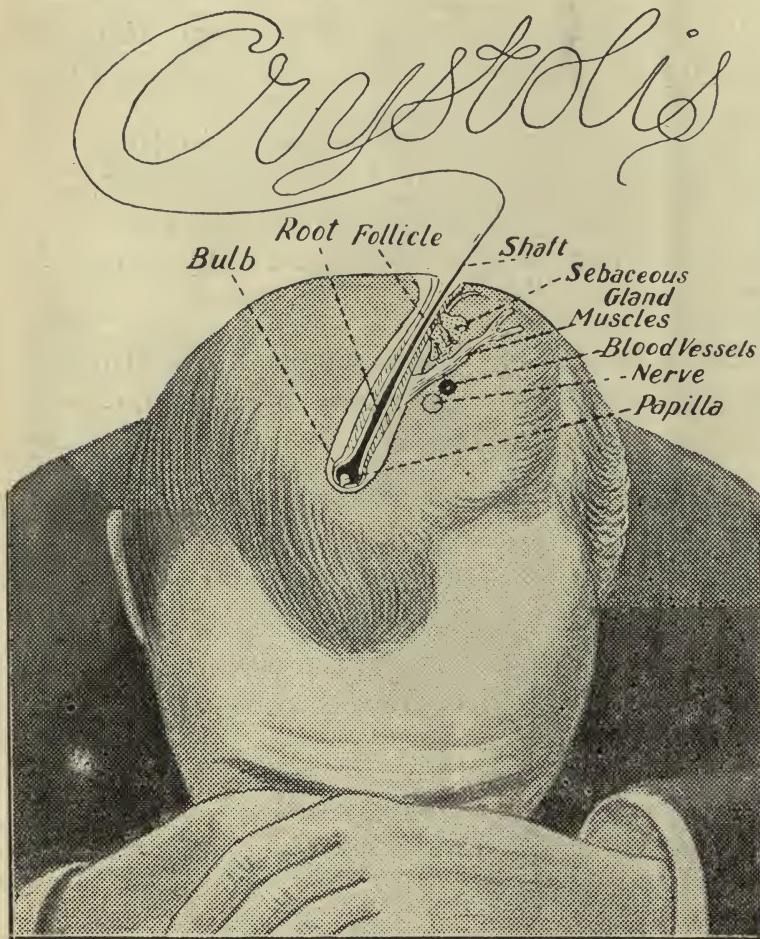
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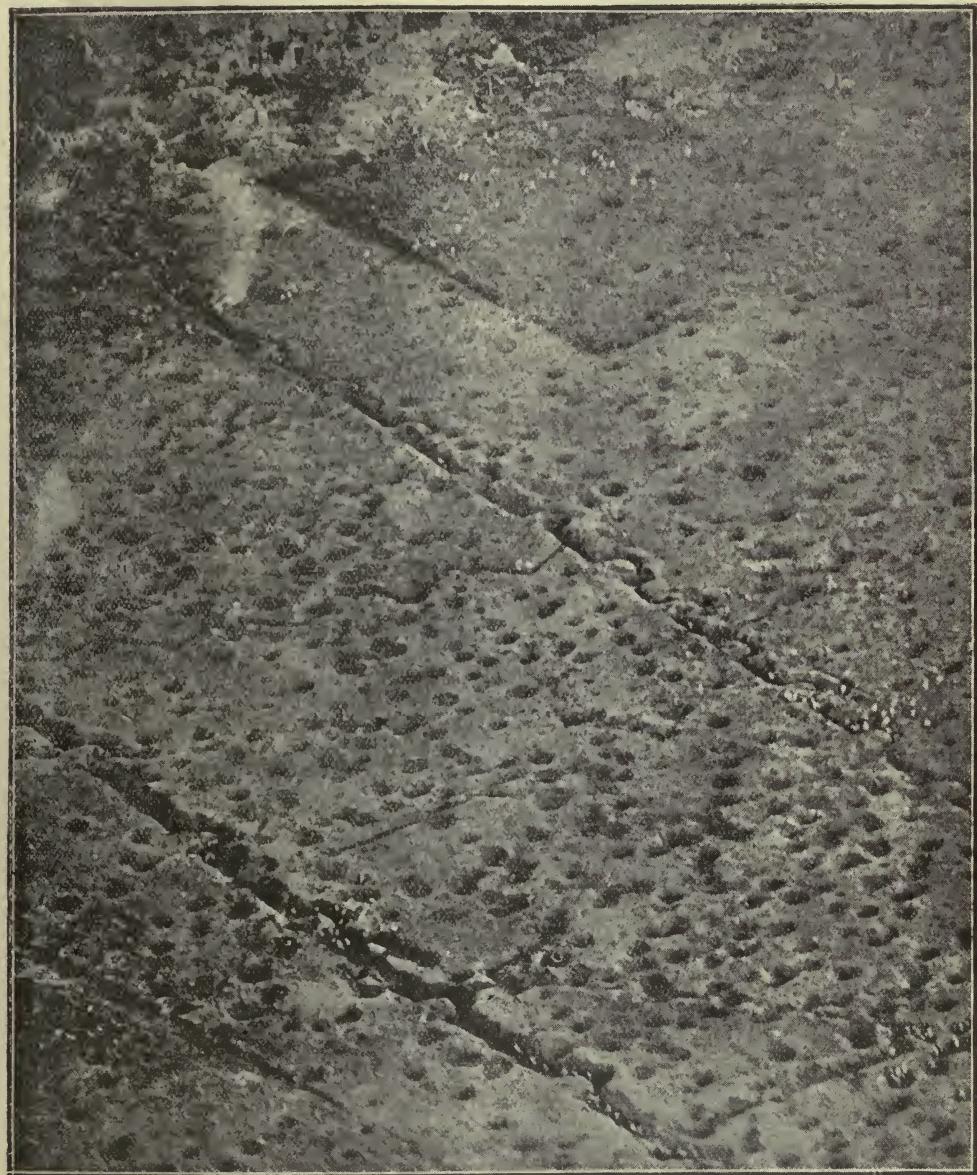
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This photograph was taken from an aeroplane at the moment when the French were leaving their trenches to charge the Germans at Soyecourt. Note the shell holes which pockmark the ground.



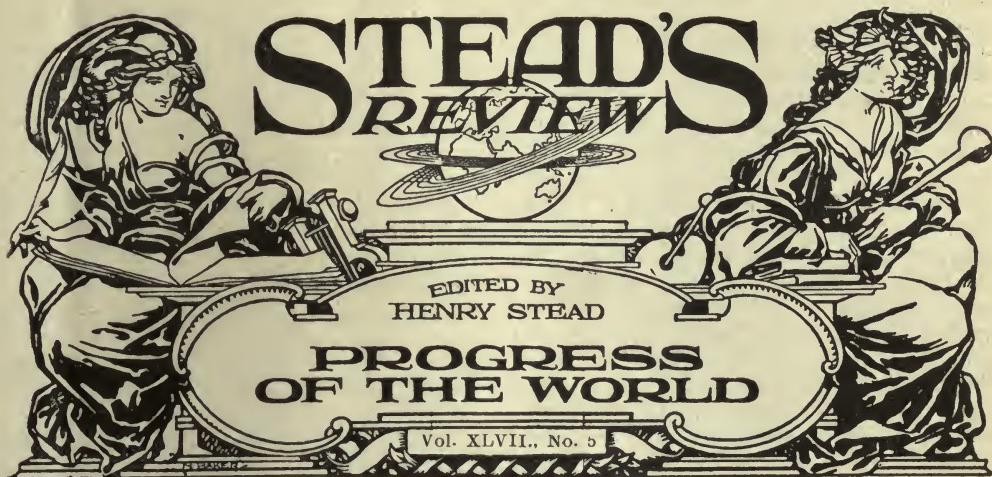
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Stuck in the mud on a heavy road.



FEBRUARY 24, 1917.

Now or Never!

At last those in authority are speaking out plainly. Lloyd George, Lord Curzon, Sir Edward Carson, Mr. Hughes all tell us that the situation is grave, has indeed never been graver. True, all anticipate final victory, but there is a notable tendency to more frankly admit the seriousness of the position than has ever before been shown. That is all to the good. For too long we have been told that ultimate success is certain, that time fights on our side, that it is only a question of waiting long enough and the ripe fruit of victory will fall into our mouths. Now a different tone is being adopted, and a more truthful. There is to be a terrific trial of strength within the next two or three months. If that trial proves the Allies more powerful, shows them triumphantly smashing through the enemy trenches, all will be well. If, on the other hand, the utmost efforts of French and British only bend, do not break, the enemy battle line—what then? Will we again fall back on the time-fights-on-our-side theory? Will we definitely adopt the starvation policy as the only means of ending the struggle satisfactorily? Or will we think it time to discuss the question of peace? In far-away Australia it is almost hopeless to try and give the right answer, but it is perfectly ob-

vious that there are many factors which must influence the future action of the Allies, factors entirely out of the ken of the man in the street, who is little troubled with knowledge of European or international conditions. However, all our statesmen are apparently agreed on the point that this spring, at latest this summer, that supreme effort must be made which, if it does not abruptly end the war, will, at any rate, indicate finally what that end will be.

The Go-On-Until-We-Win Policy.

There has been, ever since the battle of the Marne, an ever-strengthening conviction amongst Allied peoples that as long as the Germans could be held, as long as they failed to break through in France, all must be well, for time fought on our side. Day by day we became stronger and the enemy became weaker. As week followed week and month succeeded month, our ammunition production increased, our man power was steadily mounting up; and as surely as we were becoming more and more formidable the Teutonic nations were wasting away. Time was on our side directing the attrition of enemy soldiery, of needed supplies of food, all we required to do was to go on long enough and we must win. Now, that policy was a perfectly sound one, as long as the end of Allied resources was so far distant

as to be invisible, as long as attrition was in very truth fighting our battles within the enemy camp. But if, in the long run, the tremendous drain on Allied men, money and material brought within sight the exhaustion of resources, then that policy, instead of being a counsel of victory, was in reality a counsel of defeat. Or, if, conversely, attrition were not after all bringing the enemy to an end of their resources, then there was really no prospect of go-on-until-we-win bringing us, in the end, final victory. We have become so accustomed to put implicit faith in time-on-our-side that we scout any suggestion that unless we set ourselves to achieve victory within a definite number of months the fickle jade may slip altogether from our grasp. The conviction is being forced on us, is being voiced by experts and well-known correspondents, that failure this year means that compromise-peace in the long run which is viewed with such dread by the majority of folk; by those who are convinced that a peaceful Europe during the twentieth century can only be secured by the utter defeat of Germany, by her extinction as a great power. The utterances of statesmen in all the Allied countries show, between the lines, the same conviction. Therefore do they urge the putting forth of a mighty effort now, not next autumn or next year, but at once—and rightly urge.

The German Policy.

For the first two years, and more, of war the *Entente* policy was to go-on-until-we-win, the German effort was to secure a definite result speedily. Having failed to crush France, having been unsuccessful in their efforts to detach Russia from the Alliance, having found it impossible to knock out Italy or to strike a blow at England, the Germans, it would seem, intend to adopt the old policy of the *Entente* slightly modified. They cannot now hope to go-on-until-they-win, but they can set their faith in going-on-until-their-foes-are-exhausted. If they can, that is, hold their present battle fronts, feed their people, and everywhere check Allied attack, they reckon—it may be without justification—that the Allies, realising the hopelessness of smashing through, noting the gigantic daily cost of the war, feeling the huge economic strain, will be constrained to talk peace, a suggestion they have utterly rejected thus far. Then, holding still parts of France, all Belgium, Poland, Courland, Wallachia and

Serbia, the enemy would bargain with us, would evacuate territory it is true, but would demand in exchange a free hand in Asia Minor, dominance of the Balkans, and an independent Poland. That, at any rate, it would seem is the calculation of Teutonic statesmen as expressed in the German papers. Hang-on and hold-out, they say to their people, and the Allies will come to terms rather than continue the war for further years. The reply of the Allies should be in the hammer strokes of Haig and Nivelle this spring.

Can the Enemy Hold On?

Whether the new enemy policy can be carried out can only be proved on the field of battle, yet, in one thing only are they likely to be in worse position today than they were a year ago. During 1917 they will have opposed to them in the west millions more British soldiers than they found there last year. These soldiers, too, have with them guns and munitions the like of which have never been seen before on the western side of the battle front. It is improbable that the Russian armies are much more numerous than they were in 1916, though they may perhaps be better gunned. King Victor's forces are no doubt better supplied with artillery and shells, but their numbers will not have been greatly increased. Only in the west then is there prospect of disaster overwhelming the Germans. Whether it does or not depends, however, a great deal upon the Russians, and this brings us to the particular weakness of the Allies as thus far disclosed, and to the particular strength of the German position. The Central Powers have made use of their central situation to the full, nor have they neglected to utilise to the best advantage that unity of control which has been the outstanding feature of all their campaigns. We may liken the many battle fronts to the rim of a cart wheel. On the hub is seated the German General Staff directly connected with every section of the rim by spokes radiating from the hub. Whenever an attack is contemplated at any particular spot reinforcements are sent down the nearest spoke, if necessary men are withdrawn from other parts of the rim and cross the circle to the new scene of activity. When the Allied pressure at any point on the rim becomes dangerous troops are rushed to the spot from the centre or from wherever they can be spared. If two or three attacks occur at the same time reinforcements are

distributed accordingly, and unless the pressure is kept up continuously men will always be available.

The Inner Position.

Now the geographical position of the Allies is nothing like as favourable as that of the Germans, and each of the *Entente* Powers being independent and self-contained, it has hitherto been impossible to reproduce that unity of control which has been so important a factor in German success since the war began. If the Germans were defeated in East Prussia troops were hurled across the Empire to the rescue, but if Grand Duke Nicholas found von Mackensen too strong for him the Allies could send no reinforcements to assist him. All they could do was to batter against the enemy lines in France with the object of compelling the Germans to detach part of von Mackensen's force from the east to prevent disaster in the west. The Germans had, however, provided for that contingency, and, although severely battered, managed to hang on without having to make any demand on the eastern army for help. Brusiloff's Galician offensive saved the Italians, and they took advantage of his effort to push forward themselves, but, once the Russian drive had ended, resistance to the Italians stiffened again, and their progress was checked. The Allies, having to go right round the rim of the cartwheel, are at an immense disadvantage to the Germans, whose interior lines make possible the rapid concentration of troops at any threatened point. Then, too, the immense difficulty of carrying out collective action has been thoroughly demonstrated during 1915 and 1916. To succeed there must be continuous pressure on the Russian, Roumanian, Macedonian and Italian fronts, combined with three, four or perhaps five simultaneous offensives at different points in the west. Only by forcing the enemy to defend all fronts at the same time, and by making several mighty drives at once, can we hope to successfully counter the tremendous advantage the Germans have in their interior lines and single control.

Will the Germans Attack First?

According to our own accounts we are in overwhelming superiority in the west. Conscription has given us a mighty army, at least 4,000,000 strong, more numerous even than that of the French. Glowing accounts of our permanent command of the air are

constantly appearing. Correspondents never tire of telling us about our gigantic munition output, of the way in which our great guns now dominate those of the foe. We also read about depressed and demoralised enemy soldiers; about battalions consisting of boys not eighteen years old; of the physically unfit hastened to the front to man the trenches; of shells which fail to explode, of enemy aircraft which dare not now venture over our lines. By our own showing, then, we have every advantage in numbers, in guns, in knowledge of hostile movements. Our armies, too, are magnificently fed, whilst behind their lines the German soldiers know their kith and kin are starving. Surely, then, when we do deliver the 1917 spring attack, it will achieve far greater results than the delayed spring offensive of 1916. Yet we may be fairly certain that the enemy will make a great effort this year, as they did last at Verdun, with the object of delaying the Franco-British stroke, compelling its postponement until summer, when it would be too late to reap the fruits of victory. The Crown Prince's attack on Verdun undoubtedly interfered with Allied plans, for, in order to hold the threatened citadel, the French were obliged to throw troops into the Meuse conflict which had been intended for a mighty offensive elsewhere, had to concentrate in the defence of the town guns which were to have been used in the spring drive.

Verdun Would Have Fallen.

The British commander had not the men or the guns to carry out an offensive on his own account, and nothing could be done until the French had got together reinforcements, and the British factories had sent over more guns and millions of shells. Even then, it now appears, that the Somme offensive was made, not so much with the intention of piercing the enemy front, as with the object of saving Verdun. Many people have taken occasion to criticise me for having so long insisted, last year, that Verdun would in all probability fall. That I was not far wrong in assuming the fortress to be in the gravest peril, even in June, is now demonstrated by Sir Douglas Haig's statement in his official despatch. He there asserts that Joffre told him that Verdun could only hold out three weeks longer, and that therefore it was highly important that a great offensive should be started on the Somme not later than the end of June. The drive began on July 1st, and, to hold that

endangered front, the Germans were compelled to transfer troops from Verdun to Picardy. They could not send soldiers from the east because Brusiloff was raging in Galicia, and, in addition, they were compelled to keep a large army immobilised on the Roumanian frontier awaiting developments in that region. Not only was Verdun saved, but the containing forces were so weakened that, by two bold pushes, the French were able to regain much of the territory it had cost the enemy so much blood to win. History will probably repeat itself, but a German offensive in the west should not, this year, cripple our efforts and brake our offensive, as the assault on Verdun did last, for our superiority is too great, and no matter what furious effort the enemy make we should be able to quickly crush them, and begin our own offensive at the appointed time. To doubt that is to doubt everything we have been told about our magnificent improvement on the one hand, and the German decline in men and *morale* on the other.

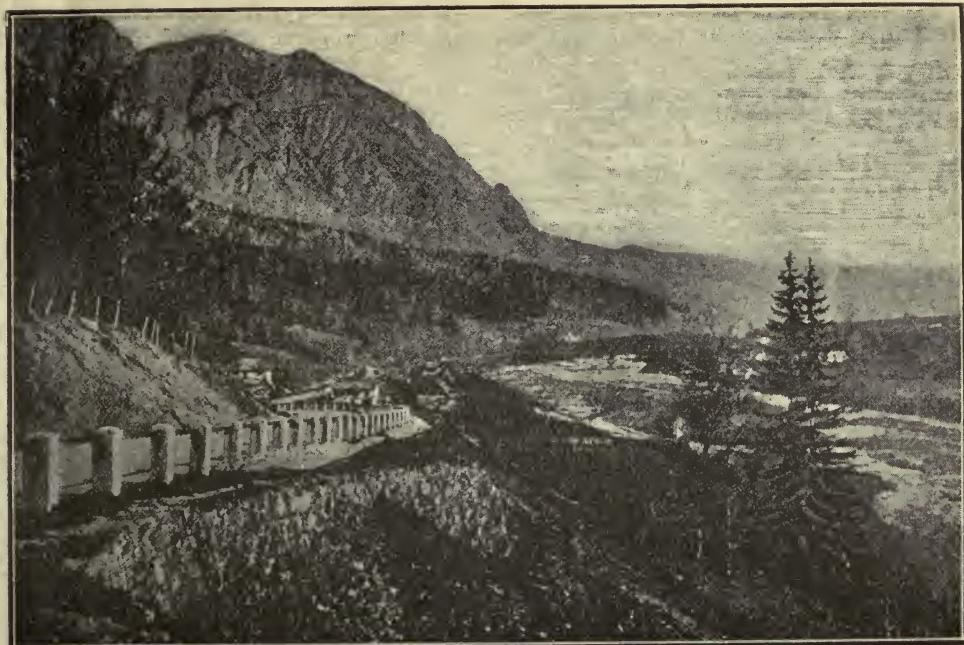
Several Drives at Once.

Still, whilst any German effort, no matter how terrific, should be quickly smothered, it does not necessarily follow that, when our offensive is delivered, it will immediately crumple up enemy resistance, and smash a hole in opposing defences through which cavalry, and guns, and infantry can pour to take the Germans to north and south in the rear. We know that to break the enemy lines we must be immensely superior in guns and men, but we have not yet obtained a measure of the needed superiority. Presumably we now outnumber the Germans by two to one, possibly three to one. When the Germans launched their great assault at Verdun they pushed for four miles through the French defences in four days, but then the hastily gathered guns and soldiers of our Ally, flung into the breach, first checked and then finally held them, ultimately turned what looked like a disaster into a glorious victory. Had the Germans had men enough to have carried out an equally great offensive at some other point in Champagne, Artois or Picardy concurrent with their drive at Verdun, the fortress might have been theirs to-day. Fortunately, however, they had not the soldiers available, and the French were able to meet and parry the single mighty thrust the enemy made, using for the purpose their reserve army and reinforcements drawn from other parts

of the front. I have set this out again, although everyone is of course familiar with the Verdun campaign, in order to show that, if the Franco-British operations in the spring consist of one terrific thrust only, it is quite possible that, although several miles may be won forward, a decisive victory would not be won. There must be two, three or even four assaults delivered in force and simultaneously; that is the lesson to be learned from last year's campaign. Only in this way can we hope to get through. To carry out several drives at the same time requires immense superiority in artillery, in munitions and in men. The Germans had not this superiority last year, and they failed at Verdun. Everyone assures us we have it to-day, so we ought not to fail.

Shortening the Enemy Front.

In one way the Germans are in better shape to meet attacks this year than they were last. It has been stated that although they have overrun Wallachia and Dobrudja that success is, to some extent, counterbalanced by the fact that the enemy must now hold an additional front from Bukowina to the Danube, which, with Roumania neutral, they did not need to guard. There is little comfort, though, to be gained from that assumption. As a matter of fact the success the enemy have won in Roumania has actually greatly shortened the front they have to hold, for it is now admitted that from, at any rate, the early spring of last year, the German General Staff kept a large army, estimated at 500,000, in readiness for the incoming of the Balkan state. In fact it is said that Berlin constantly urged Vienna to declare war against Roumania in order that the dangerous salient could be wiped out, and the great stores of food and oil hoarded in Wallachia be secured to meet enemy needs. Vienna, however, refused to open hostilities, or even to send an ultimatum demanding a definite declaration from King Ferdinand's Government, but, fortunately for the Central Powers, the Allies obligingly pushed Roumania off the fence, and thus, as it turns out, played straight into Germany's hands. The manner in which the Germans brought their guns over the snow-drifted Transylvanian Alps, transported an army across the mile-wide, swift-flowing Danube, and, compelled the Roumanians to evacuate the whole of Wallachia is now being referred to in terms of grudging admiration by military critics at



THE FAMOUS PREDEAL PASS THROUGH THE CARPATHIANS.

Which the Roumanians were obliged to hastily abandon owing to the advance of the enemy behind them, in Wallachia.

home, but of the actual military achievement itself we are not now concerned.

A Formidable Army Freed.

What does matter, however, and will count a great deal during this year, is that the new Sereth-Danube front can be easily defended, will probably be held by Bulgarians and Turks, and that therefore the half-million men neutral Roumania kept immobilised will be available either for a new offensive in Italy or France, or can be held in reserve ready to reinforce fronts attacked by French or British in the west. Further, whilst the new line from Dorna Watra to Galatz is one of great natural strength, and is probably being held by Germany's Balkan and Ottoman Allies, it is also a new front for the Russians to watch, compels the Tsar's generals to keep a large army always on the watch, which might otherwise be carrying out a great offensive in Galicia or in the north. If the Germans have definitely decided on a policy of hang-on and hold-out then they will probably utilise the liberated Wallachian army as a reserve to check hostile advance in the west. But it is conceivable that they will make a desperate attempt to repeat the Roumanian campaign in Venetia, cripple yet another foe, and further shorten

the front they have to hold. If they could be sure of success it would pay the Germans to thrust at Italy even if, as a result, they could not reinforce their western front. They could afford to lose many square miles in Flanders if, at the same time, they conquered Venetia, occupied Venice and saved Trieste. Such an achievement would not only reduce their Italian front by some 120 miles, but it would be a most severe blow to one of the principal members of the *Entente*. At one time it seemed probable that the released Wallachian army would be thrown against Sarrail, but the Germans evidently do not fear any danger from the Salonikan force, and, no doubt, prefer that experienced Allied soldiers should be kept occupied by Bulgars, than that they should be transported to some other front to swell the number of those opposing Teutonic forces.

England the Menace.

As already pointed out the improvement in Allied prospects is due to British soldiers and to British guns. The conscripts of England, and the artillery and shells turned out from British factories, make possible a victory this year, which proved unattainable last when Germany still led us in artillery, was not sufficiently outnumbered

in men. The enemy are naturally perfectly aware that their present danger comes from England, that if England fails there is no hope of the *Entente* wresting victory from them. Therefore, it is quite understandable that they should bend every energy to an attempt to counter the two great advantages Great Britain this year gives the Allies. To do this there has been a levy *en masse* in Germany, the object of which is to greatly increase the munition output, and to further strengthen the armies in the field, by sending into them men hitherto reserved for necessary work in factories, whose places will now be filled by the unfit, the old, and by women under the new general mobilisation scheme. Thus the reply to the gigantic output of the British munition works is a further enormous increase in the production of the German factories. The reply to conscription in England is the sending of hitherto indispensable men into the firing line. But to continue the huge munition production Great Britain must get mighty supplies of metal and other raw material from abroad, and when the guns and the shells are made she is obliged to send them over the sea to France, to Italy, to Salonika, to Mesopotamia, to Archangel. If, then, the enemy can interrupt the transport of raw material to England, can hinder the carriage of munitions across the water, they will nullify to some extent the advantage the Allies hope to derive from their increased output, from their larger armies.

Retaliation or—?

There are those who assert that the German submarine campaign is a reckless attempt to retaliate on Great Britain for her blockade. A furious and despairing effort to starve 40,000,000 Britons as retaliation for the starvation of 130,000,000 Teutons, Magyars and Slavs, that blockade is coldly calculated to bring about. Possibly that is the main reason for the underwater activity of the U boats, but we may be quite sure that it also has as object the prevention of munitions and men reaching Europe from England. It aims to make more difficult the obtaining of materials for manufacturing guns and explosives and shells in the home factories. Let us suppose that the Germans, by their new effort, increase their munition output by 50 per cent., and that Great Britain, having some time ago reached the German standard, has further improved her production until she has almost doubled it, is, with her Allies, producing twice as

much as the enemy were last year. That is to say, taking the original Teutonic output at 100 the Allies would now be producing 200 and the enemy 150. If by her submarine activity Germany can prevent 50 per cent. of the increased British output reaching France, or can so interfere with the arrival of needed materials that the output of the munition works drops 25 per cent., she would be able to meet the Allies in the field on almost equal terms, so far as artillery was concerned. Even if the submarine campaign only prevented the arrival of 10 per cent. of the munitions intended for the front that would be, from the enemy point of view, a very notable gain. The only weapon Germany can use against England at present is the submarine. As England has now become the chief member of the Alliance, being looked to by her Allies not only for money, but for munitions and men also, it is not at all surprising that the enemy should use their solitary weapon to the utmost, and risk rupture with the United States by employing it.

Is the Campaign a Failure?

The underwater campaign has failed to totally interrupt world traffic with Great Britain—that is, of course, obvious, for ships continue to arrive and depart from home ports in great numbers. But, on the other hand, it has, for the time being, prevented the sailing of neutral vessels from Holland, from Denmark, and from the United States. England is not, therefore, getting the supplies those vessels have been accustomed to bring. Presumably, though, most of the iron-ore she needs from Spain, from Norway, and from the United States, is brought in British ships, and these vessels have, for the most part, been successfully running the German blockade. On the other hand a large number of ships have undoubtedly been sunk by the U boats, and any diminution in the already insufficient available tonnage is a matter of great concern at the present time. That Germany's object is to destroy as much tonnage as possible irrespective of its nationality is obvious. In any case, it is pretty safe to assume that every ship now sailing the seas has in its hold something or other wanted by the Allies, either for feeding their people or for prosecuting the war. The huge freights offered have drawn practically every neutral ship into the business of carrying goods for the *Entente*. In order, then, to judge of the failure or success of the sub-

marine blockade we must compare the tonnage sunk with the total world tonnage available. If only 1, 2 or 3 per cent. of the total has been lost, that is, after all, not a great matter, but if the sinkings reach 5, or even 10, per cent. then the danger is serious. Germany produces quite enough to feed all her people for some ten and a-half months, and the present shortage in the Central Empires is due to the impossibility of making ten and a-half months' supplies stretch over twelve months. This 12 per cent. shortage is crippling her.

The Danger Very Real!

Mr. Hughes, in his place in Parliament, has said many things which have hitherto been slurred over in the press and on the platform, and he thus referred to the submarine campaign, "in its present form the most direct and serious menace to the safety and power of the Empire that this war has created. The danger is very real; it is a dagger aimed right at the heart of the Empire, and so meaning life or death to us." Commenting on the present position, he said, "On the west the opposing armies are gathering themselves for what they believe will be the final assault. Armageddon is at hand. The fate of the world hangs on it. The enemy is powerful, resourceful, resolute, desperate." He even went so far as to refer to the Roumanian campaign in these words, "The Roumanian campaign has run its appalling course. Victory has followed the German legions almost as closely as a shadow. Our great enemy now straddles the whole country of our latest Ally, holding its fairest domains in its grip. The door to the East, the Mecca of Germany, is now pushed wider open. During the last four months the enemy have conquered more territory; his troops are heartened, even the people, groaning under the hardship of war, are cheered by the latest proof of the tremendous power of the German armies." Dealing with the need for men and ever more men, he said, "Did they not realise the extraordinary power of Germany? Was there one single military exploit beyond that of the battle of the Marne for which the Allies could take credit? On the other hand the German armies had been completely triumphant."

A Foolish Policy Pursued.

The reason why people have thus far failed to realise the extraordinary power of Germany is because our leaders and our experts have all along been

at immense pains to minimise enemy successes and achievements, whilst magnifying those of the Allies. What expert commentator, for instance, has dared suggest—whatever might be his own opinion—that the battle of the Marne was the only military exploit to the credit of the Allies? In making this suggestion, though, Mr. Hughes went too far, for the saving of Verdun, the capture of Gorz, and the Brusiloff advance in Galicia were all military feats of which the Allies may be justly proud. It is true, though, that the events of 1916, when viewed in perspective, do not give the Allies much cause for rejoicing. By comparison the 100 square miles won on the Somme hardly balance the 40,000 square miles seized by the enemy in Wallachia and Dobrudja. The Russian offensive won, it is true, parts of Galicia and Bukowina, but got back but an insignificant percentage of the total area occupied by the enemy in Russia. The taking of Erzerum was, unfortunately, balanced by the disaster at Kut, and the Italian capture of Gorz has not led to anything very notable. Measured by last year's achievements the position of the Allies is anything but good. Measured by their preparations for this year's fighting it is infinitely better—and that some people do not sufficiently realise.

17,000 Tons a Day.

In measuring the success or failure of the U-boat campaign we have now available the official figures given by Sir Edward Carson to the House of Commons, but before dealing with them it is well to note what the new head of the Admiralty had to say about the menace. He does not suggest, as many recent cables have done, that the danger is practically over, nor does he claim that the measures taken will be immediately effective. "I believe," he said, "that the submarine menace can and will be solved, not by a single remedy, but by the development of existing measures. Others are being devised which will greatly mitigate the evil." Sir Edward gave two sets of figures concerning losses in his speech, and yet a third set in reply to a question, and, unfortunately, none of them quite agree. Presumably the first given referred only to losses by submarine effort, the last to total losses of vessels from all causes. The figures are interesting, and are as follows:—

	Ships.	Tons.
First 18 days, December	69	201,000
First 18 days, January	65	182,533
First 18 days, February	89	268,631

All these ships were of 1000 tons or over, and included in the totals were neutral vessels as well as British. During the same periods he said 118, 91 and 134 vessels had been lost respectively, and in reply to a question he stated that the British losses had been as follow:—

	Tons.
First 18 days, December	223,000
First 18 days, January	198,000
First 18 days, February	304,000

These figures do not, however, give us the total losses, neutral as well as British, and, for the sake of comparison, these should be included, for the number of neutral ships sunk has been very considerable.

5,000,000 Tons Sunk Since August, 1914.

A rough estimate of ships, other than British, sunk from December 1st to February 18th, places the tonnage at 300,000. It is worth noting that the neutral losses during the second week of the submarine blockade were very small, pointing to the fact that neutral sailings had everywhere been cancelled. This 300,000 does not include ordinary losses through shipwreck and the like. At the end of September a Dutch firm published a very careful summary of the losses sustained by the merchant marine of the world since the war began. That estimate errs on the side of understatement, for it gives the English losses at 1,950,000, whereas Lord Curzon, in a statement at the same time, gave them at 2,250,000. Still, making this alteration, but accepting the other totals, we get the following interesting summary:—

British lost to Sept. 30	2,250,000
British lost in Oct. and Nov.	300,000
British lost in Dec., Jan. and Feb.	1,200,000
France lost to Sept. 30	224,000
Italy	" "	196,000
Russia	" "	49,700
Belgium	" "	26,400
Japan	" "	29,000
Holland	" "	157,500
Norway	" "	220,570
Sweden	" "	77,400
Denmark	" "	57,500
Greece	" "	43,000
United States	" "	28,400
Spain	" "	37,000
Brazil	" "	2,306
Allied and Neutral losses in Oct. and Nov. (est.)	200,000
Allied and Neutral losses in Dec., Jan. and Feb. (est.)	300,000
Rough total to date	5,398,700

Probably the lost tonnage is greater because there have been wrecks and other

disasters which are not reckoned in the above figures. On the other hand some of the torpedoed ships have been saved. It would be understating the case, though, to say that at least 5,000,000 tons of Allied and neutral shipping had been sent to the bottom of the sea since the war began. If only 5,000,000 tons had been withdrawn from the total mercantile marine of the world, the matter would not be serious, for that total, including sailing ships, was, when the war broke out, 44,000,000 tons; but German, Austrian and Russian shipping at once vanished from the seas, leaving only 37,000,000 tons available. Practically all the French ships were requisitioned for military purposes, and ere long the Italians, too, found it necessary to commandeer most of their ships for Government purposes. This withdrew another 3,000,000 tons. It has been stated that Great Britain at first found it necessary to take over a third of the British mercantile marine for exclusively war purposes, presumably for transport of troops, auxiliary cruisers, and the like; took naturally the finest ships obtainable, leaving the lesser fry to carry on the trade of the world. If the Government took a third—for purely military purposes—that would be about 7,000,000 tons, which would reduce the available world tonnage to 27,000,000 tons—on them the submarines have been operating.

Can Our Ship-yards Keep Pace?

In the year 1913—the greatest ship-building year there has ever been—British yards produced 1,932,153 tons, and other countries built 1,400,729 tons, a mighty total of 3,332,882 tons. In 1914 the production fell in Great Britain to 1,683,553, and in other countries to 1,169,200, but the total was still enormous—2,852,753 tons. Most of these ships, in fact all of them, were laid down before the war began. It was not until 1915 that the struggle began to affect the shipyards. In that year the British production fell to 672,933 tons, and other countries built 490,000 tons, a total of only 1,160,000 tons. Last year, though, especially since June, great efforts have been made to speed up the British production, and it is announced that on September 30th there were 1,788,162 tons under construction. If, by standardisation and working double and treble shifts in dockyards, which can turn their attention exclusively to mercantile building, the British production is pushed up to 2,000,000 this year, and the

yards of other countries turn out 1,000,000 tons, that would be a total production of 250,000 tons a month—8000 tons a day.

The Position of Italy.

The German submarine campaign, whilst directed primarily against England, is also calculated by the enemy to cripple Italy and damage France. The Italians are in rather better case than the British, producing enough wheat to feed them for eight months of the year. But they have to get some 60,000,000 bushels from abroad annually, and import great quantities of meat. They have to bring from over sea, too, all the coal they need, and almost all the iron. Timber, wool and cotton must all be imported. If the ocean trade of Italy is seriously interrupted the people will soon be in dire straits for food, and the munition factories would have to shut down for lack of coal and iron. It is certain that the stocks are exceedingly low now in King Victor's kingdom, for the price of coal has been almost prohibitive, ranging up to £7 per ton, so that even a temporary suspension of the arrival of supplies would have serious consequences. Evidently people are getting nervous, for the Government has made a special announcement concerning the regular arrival of shipping in Italian ports.

Will the Greeks Starve?

Greece was brought to the verge of starvation by the Allied blockade, and, presumably, all stocks were used up, leaving the country bare of supplies. Then, when the pressure of the *Entente* fleets was relaxed, the German blockade of the Mediterranean was declared. Neutral shipping was frightened away, *Entente* ships were badly

wanted elsewhere. Greek ships had been held up by the Allies, or were lying idle in Hellenic ports. To get supplies they have to brave the German blockade, cross the Atlantic, and, after loading in the United States or the Argentine, they have to recross the submarine-haunted sea, and again negotiate the proclaimed area of the Mediterranean. It would take Greek ships at least six weeks to fetch the needed wheat and other foodstuffs, and it is doubtful if the Greeks have enough vessels left now to carry all that is needed. Their position is indeed a parlous one. No one is likely to go out of their way to help them, but in the end, unless they decide to stand by and watch the people starve, as an indirect result of their blockade, the Allies will be forced to divert some of their wheat ships to Grecian ports. It is possible that they will not send supplies unless they receive an adequate *quid pro quo*.

Heroic Measures.

It is quite evident that the Government at Home is fully seized with the immense danger of the submarine menace. In his speech to the Commons, which has been briefly summarised in the cables to-day, Mr. Lloyd George indicated that very drastic measures indeed were to be taken to counter this latest German thrust. Enormous demands are to be made on the self-sacrifice of every class of the community—the national grit is going to be tested. Many of the means the Prime Minister said were to be adopted can, however, not have any effect on the situation for six months, or more. The farmers are to increase their crops, but the time for



VENIZELOS REVIEWING HIS TROOPS AT SALONIKA.



THE SUGAR SHORTAGE.

The lack of sugar at home has been one of the hardships the British have had to endure. Efforts are being made to grow sugar beet in England. These women are working on Lord Selbourne's estate, where this root crop has been successfully cultivated.

spring sowing is almost over. The new fields to be sown cannot yet have been ploughed, whilst the shortage of farm labour was making it difficult to do anything more than maintain the yearly average. Imports are to be severely restricted, but the Government having commandeered British shipping they must have already greatly curtailed many of these imports. For instance, if ships are not sent for Australian apples, those apples stay here. If ships are not sent to China to bring tea, the tea stays in the Celestial Republic. Presumably the present embargo will fall only on neutral shipping, which takes paper and oranges, and bananas and timber, and beer and spirits to England. That such drastic action is necessary in the United Kingdom shows the greatness of the danger. Mr. Lloyd George indicated that ship-building is to be speeded up, that low grade iron-ore is to be mined in Britain, that French forests and British groves are to be used up. All these arrangements are with a view to future conditions, for none relieve the immediate need and all require increased numbers of workmen just at a time when every man they can

possibly get is being impressed by the military authorities. It was inevitable that all emigration would be stopped, as every man is needed, either at the front or to labour for the national welfare. When we see how strenuously Great Britain is grappling with the problems of war the extravagance and lightheartedness of Australia gives cause for earnest thought. Our imports are constantly mounting, and they consist of more and ever more luxuries. Our shops are crowded, our theatres packed. We hardly know there is a war going on, we certainly are little inconvenienced by it. In England the people will soon be rationed just as the Germans are. Here there is abundance of food, money flows, there is no abatement in the search after pleasure. The contrast is not a pleasing one.

The Victory Loan.

Cables tell us that the great Victory Loan in Great Britain has been a tremendous success, and that anything from £600,000,000 to £800,000,000 of "new money" has been subscribed. Many people have asked me just what new money means. It means money that has not pre-

viously been invested in either war loans, consols, or any other stock which can be converted into the new loan. For instance, presumably all the £1,000,000,000 of the first and second war loans were converted into the Victory Loan because of the better terms this offered. That is not new money. What is not clear, however, is whether short-dated Treasury bills, bearing a high rate of interest, have been converted into Victory Loan stock or whether those bills are still outstanding and will have to be again renewed or redeemed by the new money subscribed to the present loan. Until final particulars arrive it is impossible to say just how the position is, but so far as one can judge, practically all the new money obtained will have to go immediately in the redemption of Treasury bills, of which there were £1,200,000,000 outstanding at the end of the year. Even if this were not so the new money would only suffice to carry on the war for about $3\frac{1}{2}$ months. If all these Treasury bills were converted into Victory stock it would mean that the loan had realised the gigantic sum of £2,000,000,000, and, if we add to that the former loans which will certainly have been converted, the amount of Victory money on which interest will have to be paid would be no less than £3,000,000,000. I cannot just now go again into the financial side of the war, but it does not require much common sense to see that the added load of debt another year's war would bring might well seriously strain the resources of even the richest Powers. We see here one of the most powerful arguments against the policy which has no time limit, the go-on-until-we-win idea. The Australian loan which brought in such a satisfactory total can still be subscribed for, the closing of the lists having been postponed until April 2, 1917.

COMMONWEALTH AFFAIRS.

The Coalition Government.

Mr. Hughes and Mr. Cook took longer than was anticipated to fix up the new team. But on Saturday, February 17th, agreement was arrived at. Mr. Hughes tendered his resignation to the Governor-General, and a couple of hours later the new Ministry was sworn in. It is composed as follows:—

W. M. Hughes—Prime Minister and Attorney-General.
Joseph Cook—Minister of the Navy.
Sir John Forrest—Treasurer.
Senator Pearce—Minister of Defence.

Senator E. D. Millen—Vice-President of Executive Council.
W. A. Watt—Minister of Works and Railways.
P. McM. Glynn—Minister of Home Affairs and Territories.
J. A. Jensen—Minister of Customs.
W. Webster—Postmaster-General.
L. E. Groom—Assistant Attorney-General and Assistant Minister of Defence.
Senator Russell—Minister in Charge of Shipping.

The last two members are honorary Ministers, but Mr. Groom, at any rate, would seem to have his hands pretty full. In making his statement Mr. Hughes was careful to announce the names of Ministers in their order of precedence, as set down above. It will be seen that the Liberals have six Ministers to the Hughesites five, and that the most important portfolios have fallen to them. The most notable omission is Sir William Irvine, who has, however, been appointed as one of the three delegates to represent Australia at the Imperial Conference. His inclusion in the Ministry, after his declaration about conscription, was, of course, impossible, but it is good that his talents will still be at the service of Australia. If the Conference really deals with the reorganisation of the Empire, Sir William's voice will carry more weight than that of any other statesman we could send. The other members of the Australian delegation are to be Mr. Hughes and Sir John Forrest. Financial matters will enter largely into the question, and it is highly important that someone of experience and great financial knowledge should be in England on Australia's behalf just now. Sir John would countenance no wild or unorthodox methods of raising money, and there will be general confidence felt now that he is in charge of the money bags. Mr. Hughes has to go because he is head of the Government, and the Prime Minister was asked. General Botha, however, finding it impossible to get away, owing to the state of politics in South Africa, sent General Smuts to represent the Union. As the chief objection raised by the Labour opposition in Parliament is to Mr. Hughes going home a way out of the *impasse* threatened here might be found by his following Botha's example. Australia would still be well represented without him.

Will There Be An Election?

Immediately after announcing his new Ministry, Mr. Hughes told the House that he proposed to ask members to request the Imperial Government to provide by legis-

lation for the extension of the lives of both Houses of Parliament until the expiration of six months after the final declaration of peace, or until October 8th, 1918, whichever is the shorter period. Evidently the Opposition will object to this suggestion, and as Labour has a majority in the Senate, will throw out any proposal of this nature put forward by the Coalition Government. If the Opposition takes this attitude, then, an early election is inevitable. Whether only for the Senate or for the Representatives as well, remains to be seen. To have an election for the Senate now and one for the Representatives in October means double expense, and the Government is pledged to economy. On the other hand if the Coalition were to win a couple of seats in the Senate, and hold those they now have, they would command a majority in the Upper House, and could then put through the extension of the life of Parliament, and thus avoid an election for the Reps. in October altogether. If there were a double election and the Coalition failed to get a majority in the Senate, although it kept its advantage in the Lower House, the position would be no better than it is at the moment. As the Senate holds the key to the position the easiest way out of the difficulty would be to have an election for the Senate only. If Labour were defeated then it would be fair to assume that Mr. Hughes and his new colleagues represented the people of Australia. If, on the other hand, Labour won, then we might assume that the Coalition Government was not approved of by the electors, and that a general election for the selection of Representatives would result in the removal of Mr. Hughes from the head of the Government. His former colleagues, now members of the Official Labour Party, are evidently quite determined that Mr. Hughes shall not go to England to represent Australia if they can help it, and are prepared to go to any lengths to prevent his departure. It is obvious, therefore, that either Australia will not be represented at the Conference yet awhile, or that Mr. Hughes will go to London, leaving his colleagues to fight an election for the Senate without his help.

Mr. Hughes Might Go Later.

It may be that, in a mood of noble patriotism, Mr. Hughes, seeing that the trouble is almost entirely due to the desire of the Opposition that he should not represent Aus-

tralia, may decide not to be one of the delegates who go to London. It is highly important that the Commonwealth be well represented at the Conference, for which the other Dominion statesmen are already gathered together, but, under the circumstances, it seems impossible for Mr. Hughes to leave Australia for another two or three months. Rather than have no one speak for the Commonwealth at the Conference table, why should not Mr. Hughes allow the delegation to go without him? Later, if he wins the Senate elections, he could journey to London to take part in its deliberations—if these had not already been concluded. If, on the other hand, he does not win the Senate he could stay on here and fight the election for the Lower House. It is a great pity that party squabbles in the Antipodes should hold up the councils of the Empire. yet there is undoubtedly truth in the assertion of the Opposition leaders that Mr. Hughes, after his defeat at the Referendum, cannot be regarded as having the support of a majority of the people of the Commonwealth. Surely, though, it would be possible for all parties to agree on some delegate to send in place of Mr. Hughes for the time being until the electors had an opportunity of showing their desires when they vote for the Senators in April or May. It would, at any rate, be more dignified to send a delegation which did not include Mr. Hughes, than to keep the other Dominions waiting, or have them carry on a Conference, as to the future of the Empire, without any representative from Australia being present. Presumably, within a day or two, we will know the course the Government intends to adopt. So far as the new Ministry is concerned there can be no doubt that it is an immense improvement of the last, and there is pretty general satisfaction that men of such experience and administrative ability should be in charge of the affairs of the country at the present war crisis. There is to be no legislation at all save that called for in connection with the prosecution of the war. The Official Labour Party, thanks to its control of the Senate, can be quite sure that nothing can be done without its consent, and it is indeed unfortunate that the personal hostility Mr. Hughes has managed to awaken stands in the way of an amicable and sensible settlement of the present difficulty.



WASTE NOT, WANT NOT!

In German towns regular collections are made of all fruit stones, none of which may be destroyed. The collected stones are crushed and the oil extracted for industrial and military purposes.

WILL GERMANY STARVE ?

The Allies have always had two strings to their bow. Perhaps this has not been of true advantage, for when one string frayed we then turned to the other, and when it wore thin reverted again to the first, and concentrated too little on either alone. We assert always that, in the end, we will be able to smash the Germans in the field; that is our military string. When offensives fail to break the enemy line, when Poland and Serbia and Roumania are conquered by the foe, we cease to depend so much on our military string, but instead magnify the value of our blockade tactics, notch our arrow on our starvation string. That, we are assured, will give us final victory.

When we get competent neutral observers inclining more and more to the view that the present deadlock in the field cannot be broken, and looking instead to attrition as the means which will bring the disastrous struggle to an end, we cannot but be im-

pressed and ourselves begin to believe that only by starvation can the Central Powers be beaten to their knees. That conclusion may, of course, be quite wrong, but those who have come to hold it naturally are intensely anxious to know the actual state of affairs in Germany to-day with regard to food and other necessary supplies. Are supplies really short—is food likely to be scarcer? One would imagine it quite easy to get reliable information on the point, yet, actually, the evidence is of the most conflicting nature, and it is impossible to say definitely whether starvation does or does not stare the German nation in the face.

When the war broke out it was confidently asserted that lack of food would compel the Germans to give in within twelve months, but, as my readers will remember, I showed, by giving details of imports and production, that it was not to be expected that starvation would be experienced by the Central European nations for a long time.

By at once tackling the problem and practically putting the people on rations from the very beginning, the enemy were able to carry on so far as food was concerned. They made mistakes, of course—notably the wholesale slaughter of pigs—but on the whole their arrangements to meet the certain shortage proved sufficient.

The natural thought which will occur to everyone is that, if the besieged countries were able to get along, somehow, during 1915 and 1916, is it not reasonable to suppose that they will be able to manage equally well during 1917? Why, in view of the successful rationing arrangements of the last two years, we now assume that those will fail during 1917, is a matter which is puzzling a goodly number of people. The explanation usually given is that the Germans have been living on their capital very largely, and that this capital has been more or less exhausted during the last two years; further, that, whilst in 1915, and to a lesser extent in 1916, Germany was able to draw supplies through neutral countries, the tightness of our blockade has now made it quite impossible for neutrals to do any importing whatever for the enemy. Both these things are no doubt true, but have the inroads on the capital of grain, of meat, of copper, of petroleum brought the nation to a point of exhaustion? Will the stopping of the leakage through neutrals in very truth seriously jeopardise the well-being of the Central Powers?

Reports from Amsterdam tell us that the people are practically starving. Berne informs us that, although there is food shortage, there is no real distress. Ambassador Gerard says that the people have enough food; members of his staff say that the mortality amongst the children, owing to the lack of milk, is appalling, and that famine is already stalking through the land. The Food Dictator, von Batocki, states that there is enough, with care, to go round; a colleague of his in the Council of the War Food Bureau, Dr. Abel, insists that the greater part of the population is underfed, and that Jewish roguery and agrarian greed are exploiting the people in an unendurable fashion. And so it goes on from day to day, evidence so conflicting that no one can feel safe in assuming on the one hand that the enemy are starving, or, on the other, that they have plenty of food. Under the circumstances the best thing to do is to ignore all the reports about shortage and plenty—these were just as definite and authoritative a year ago as

they are to-day—and to study the question from a common-sense point of view.

We may assume, right away, that so far as wheat and other grain is concerned Germany did not have any notable stock on hand when the war broke out. The cataclysm came at the end of the harvest year, and the new crops were just being gathered in. Stocks would be down to vanishing point—the German grain imports during 1913-14 were not notably different from those of 1912-13—but an entire harvest would be available. The annual production of grain in Germany alone was 28,000,000 tons—4,360,600 tons of wheat, 3,880,000 of barley, 11,600,000 tons of rye, 8,520,000 tons of oats—and she only imported 5,000,000 tons from abroad. Her imports of wheat were about 2,500,000 tons annually, but, as she used a million tons of wheat for making flour, which she exported, her actual requirements to make good the deficiency in her own crop would be about 1,500,000 tons. She imported 3,000,000 tons of barley and a million tons of maize. She also imported oats and rye, but in smaller quantities.

The immediate problem the food controllers of Germany had to face was to make ten months' supply of grain last for twelve. To do this they rationed the nation and prohibited the feeding of grain to animals. This solved the problem so far as the provision of bread for the people was concerned, but raised grave difficulties with regard to the feeding of stock. The people would have enough bread, but the cattle and pigs and sheep would starve. Therefore the controllers decreed that hundreds of thousands of pigs had to be slaughtered.

This, as it turned out, was a grave mistake, but it was done, and the carcasses were put into cold storage, where it is believed the bulk of them still remain. At first sight this slaughter would seem to have been a wise measure, but events have proved it to have been a very precipitate action, for the thing in Germany which most acutely affects the people is lack of meat, not of grain, and the killing of the swine so seriously reduced the annual natural increase that just when most needed the supply of pigs is considerably less than usual. The question of fodder was difficult too in the case of cattle, and it was deemed advisable to conserve milch cows only.

When the war began there were over 23,000,000 cattle in Germany, of which between 5,000,000 and 6,000,000 were calves. At the animal census, taken in May last,

it was found that there were only 19,800,000 cattle left; 6,000,000 of these were calves, and the Government decided that 8,000,000 must be set aside for breeding, and to secure the milk and butter supply. This left only 5,800,000 cattle in the country which could be killed and eaten, to which must be added the natural increase. It would seem that the people consumed during the first twenty-one months of the war just about 4,000,000 cattle, plus the natural increase. In addition they drew considerable supplies from Holland, Denmark and Roumania, which supplies they could not obtain during 1916.

It would be pretty safe to assume that from May to December, 1916, the number of cattle in the country would be reduced by at least 2,500,000, leaving only 3,300,000 available for consumption during 1917. The depletion in the stock of pigs, sheep and goats is probably greater than of cattle, and unless the enemy are able to obtain fodder, or meat, from the territories they have conquered, it would seem that in another year's time, or by August, 1918--after four years' war--the meat supply of the Central Empires would have come to an end altogether, whilst serious inroads would have been made into the milk and breeding stock also. In fact, even if the war were to end to-day, it would be a very grave problem for Germany how to replenish her vanishing herds. That problem will be great in every country, belligerent and neutral, for the high price of meat has induced the United States and Argentine to slaughter too freely, and has also forced France to kill off her live stock in alarming manner.

Still, it seems clear that, if it were not for the need of providing for next year, the Germans could get along during 1917 just about as well as they did during 1916 so far as meat is concerned. It is important though to discover what stock the enemy got by their occupation of Wallachia, for it is fairly safe to assume that in commandeering Roumanian cattle and pigs, the German authorities will not bother about putting aside large herds for milk and breeding purposes. Sixteen years ago the number of cattle in Roumania was returned as 2,600,000, but since then stock breeding has been considerably developed, and although I have not been able to obtain later statistics we might with safety assume that the herds had been increased to at least 3,000,000. In addition to cattle there are large numbers of native buffalo, to be found chiefly in the Dobrudja and the Danubian

swamps. At least half-a-million of these beasts, so it is said, which are used largely as draught animals. Most of the cattle ranches are in Wallachia, although a few are to be found in Moldavia.

One way and another, including buffalo, the Germans will have obtained at least 3,000,000 cattle, for the Roumanians are not likely to have slaughtered them when the army retired before von Falkenhayn and von Mackensen, and it was, of course, utterly impossible to get such slow-moving beasts away over the crowded roads, whilst the swift pursuit was ever following. If 70,000,000 Germans managed to subsist on 4,000,000 beeves last year, we may be quite certain that 5,000,000 Roumanians, presuming that many are left in Wallachia, will have to be satisfied with 300,000 or so, and that the balance will go to feed hungry Germans and Austrians. Roughly, then, we may take it that the overrunning of Roumania has pretty nearly doubled the available beef supply of Germany. It is almost impossible, though, to ascertain the position in Austria, but presumably the situation there ought not to be quite as acute as in Germany, as, in ordinary times, that country has larger herds in proportion to population than has the Kaiser's Empire. Still, no doubt Austria would demand a considerable share of the Roumanian plunder, and, therefore, assuming that the enemy recklessly slaughter all the Roumanian cattle, it would give them beef for six months only--still, we must not overlook the fact that such supply may make an immense difference, and if, owing to getting it, the Germans are able to carry on the struggle for half a year longer, the actual cost to the Allies for the extra six months' war would be no less than £1,800,000,000. A heavy price to pay for the loss of Wallachia!

In addition to cattle Roumania has at least 6,000,000 sheep--chiefly in the Dobrudja--and 2,000,000 pigs, chiefly in the forests of northern Wallachia. These supplies would also be of great value to the enemy, would enable them indeed to hold our for several months longer. But it is well to note for months longer, not for years. An examination of the position, then, shows that those who asserted that the collapse of Roumania would considerably prolong the war were perfectly right so far as the Allied starvation bow string is concerned. But there is a further way in which the incoming of Roumania and the overrunning

of Wallachia has helped the enemy. The swine slaughter of 1914 was decreed because of the anticipated shortage of feed for the pigs, owing to the need of conserving everything for the cattle. Great supplies of fodder can be got from the fertile province now in enemy hands.

There is no doubt that the meat question is the most serious which confronts the Central Empires, but shortage of cereals and potatoes must also be a matter of considerable concern. Here again the Roumanian booty will relieve the situation. As I have shown above the Germans, in ordinary times, needed to import about 5,000,000 tons of cereals. They claim that they captured 1,000,000 tons of 1915 wheat and 2,000,000 tons of 1916 wheat in Roumania. That is clearly an exaggeration, as the total Roumanian wheat production is barely 2,000,000 tons per annum. Still, in addition to wheat, the enemy must have got great supplies of maize, of which Roumania produces 70,000,000 bushels a year, of oats (annual production 25,000,000 bushels), and of barley (yearly production 20,000,000 bushels). Not only would the enemy find the exportable surplus of the 1915 crop, but they would get practically the entire yield of 1916, save only what the Roumanians had been able to get away. When we bear in mind the speed of the enemy thrust, the paucity of railway lines, impassability of the roads, and the early hostile domination of the Danube, we cannot hope that our gallant Allies were able to save much. It has been over and over demonstrated that it is almost impossible to destroy great stores of grain.

Not only did the Germans find in Wallachia a mighty granary, cattle, pigs, and sheep, but they secured some of the most fertile land in Europe, which, even under the primitive methods of peasant cultivation, yield greater crops per acre than the sterner soil of Prussia or Bavaria. The enemy, with that careful attention to detail which is so exasperatingly efficient, are no doubt already seeing to it that every possible acre will be sown, and are pretty certain to break up great new areas with steam and motor ploughs, a task the Roumanian peasant, with his ancient tools and buffalo-drawn implements, would have found impossible. We may, at any rate, assume that the 1917 crops will not be less than those of 1916, or of pre-war years. That is to say, that, if the enemy's own fields continue to yield an average harvest, the 33,000,000

tons of cereals the Germans need would be forthcoming. Again we have to leave Austria out of the calculation, but, in ordinary times, the grain production in the Dual Empire suffices for all internal needs; in fact, there used to be a small surplus which was exported.

The question, then, is whether the German acres will continue to yield as much as heretofore. The answer to that is, I think, that they cannot possibly be expected so to do. The reason for this assumption is not that there is likely to be shortage of labour—the prisoners supply that—or that less area will be sown, but is based on a study of the yield, per acre, of German fields during the last thirty years. In 1892 the average yield per acre of cereals was 10.3 cwt., in 1912 it was 15.7 cwt., an increase of 52 per cent.! In England, during the same period, the yield remained stationary. In potatoes, too, there was a similar great improvement. In 1892 the yield was 3.6 tons per acre, in 1912 it was 5.5 tons, an increase of 53 per cent. Great Britain's acre-yield increased from 4.2 to 5.7 tons, or 36 per cent. Now, the soil of Germany is far poorer than that of Great Britain, and the enemy farmers were only able to equal the British acre-yield by making use of the most up-to-date methods. We have this consolation, at any rate, namely, that when the English farmers follow their example they will get a much greater yield than the Germans can ever hope to, for these have already reached the maximum, whereas the home farmers are little further advanced than they were three decades ago.

But these up-to-date methods consisted very largely in the use of immense quantities of fertilisers. The British blockade has made it exceedingly difficult for the German farmer to get the manure he requires, and, although nitrogenous fertiliser has been produced from the air with notable success, other ingredients the land requires, and which have hitherto been brought from abroad, are now unprocurable. This being the case it seems to me inevitable that the 1916 crop in Germany had to be smaller than that of 1915, and that the 1917 crop will, in turn, be less than that of 1916. This being so, the Germans must draw supplies from outside their own borders if they are to avoid starvation, or, at any rate, the very greatest privation. Roumania can apparently make up for the supplies usually imported. It is, at any rate, conceivable that the crops grown in the Baltic provinces,

in Poland, and in Northern France, may make good the shortage in the ordinary German crop caused by lack of sufficient fertilisers.

Germany is able to get some food supplies from Holland and Denmark, but these countries, by arrangement with England, have undertaken not to export more of their local produce to Germany than they do to Britain. That is to say, Germany gets 50 per cent. and the Allies the other 50 per cent. In view of the fact that the Germans pay far higher prices than do the Allies, this action of the two little neutrals must be dictated by reasons which are not perhaps immediately plain, but which most people can make a good guess at. It may be that the interruption of shipping between Holland and Denmark and England, may result in greater supplies crossing the border into Germany, but that increase would, of course, cease directly the submarine menace disappeared. We see here another reason why the Germans have instituted the under-water blockade, and why they will continue it until such time as our navy breaks it, and makes its resumption impossible. Not only is England deprived of the Dutch and Danish produce on which she very greatly relies, but such produce must inevitably be diverted to Germany if the blockade lasts long, for it is, for the most part, highly perishable.

Before the war broke out Holland exported 50 per cent. of her produce to Prussia, 20 per cent. to Great Britain, and 11 per cent. to Belgium. Under the agreement referred to she presumably sent only 40 per cent. to Germany, and diverted the

other 10 per cent. and the entire Belgian export to Great Britain. As she exported £60,000,000 worth of food-products in the year before the war, the benefit to Germany would be great if she could long prevent the despatch of supplies from Holland by sea. Denmark, in ordinary times, sent three times as much foodstuff to England as to Germany. The value of the food exported was over £20,000,000, and consisted almost entirely of butter, eggs and bacon. A good deal of the Dutch export to England and Prussia was in the nature of re-export, but practically every pound sent from Denmark was produced in the country.

Summing up, we may assume, I think, that there is great hardship in Germany and Austria owing to insufficient supplies of meat, and of all fatty substances. Also that there is shortage of grain for, although there must at the moment be large stocks, the Government naturally has to deal out supplies with an eye on the last three or four months before the 1917 harvest begins to come in. The overrunning of Roumania must have considerably relieved the situation, and may permanently solve the grain problem. It cannot, however, greatly ease the shortage of meat, and it would seem that only by sacrificing their breeding herds can the enemy obtain beef enough to carry them on beyond 1918. The blockade, whilst at first it must force all Dutch and Danish supplies to the German market, will soon react against the enemy in those countries, which rely largely upon imported fodder on which to feed the stock which produce the butter, eggs and bacon the Germans so much want.

NEW ZEALAND NOTES.

FEBRUARY 14, 1917.

Politics for the moment are in the back-wash of public interest. The leaders of the Government (the Right Hon. Mr. Massey and Sir Joseph Ward) are still at home, and likely to stay there for some time. The Acting Prime Minister, who, by the way, was made Sir James Allen, K.C.B., by the King's command last week, is tireless in his public work. As Minister of Defence he has the heavy end of the stick. The Military Service Act is working more smoothly, and public opposition has vanished. That is because of the stringent war regulations, and the numerous prosecutions for sedition and "seditious tendency." The opposition to the Act has now been con-

verted into that most dangerous form of semi-private conspiracies, which are harmful to nation and individual. Everything depends on the length of the war, whether such a state of affairs is likely to prove troublesome. If the popular tip of a fairly early end of hostilities proves right then there is nothing to fear.

The Appeal Boards now number ten in place of the original four, and Medical Boards are fairly numerous. The vexed question of exemptions is ever prominent. The labour difficulty is daily becoming more acute, and those interested in primary production are anxious about the future supply. The Government has decided that all ballot-ed men shall first go before the Medical

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Boards, reversing the old procedure, which wasted everybody's time in the cases where men were found to be unfit. It is common talk now that the standards have been reduced so that men previously rejected many times find their way to camp. The number of volunteers is increasing. Financially embarrassed men are promised aid up to £2 per week on the lines of the British system, except that with us men must lodge an appeal against being called up on the ground of "undue hardship." This will have the effect in some cases of depriving men of State assistance. One type of man has an instinctive horror of having any public discussion of his private affairs. He will simply obey the call of his country, and he and his will suffer in silence. If any reservist is entitled to relief there is no real reason why he should be placed in the false position of having to appeal against service and publicly announce his financial embarrassment.

The Dominion has lost one of its most valuable sons in the person of Dr. Robert McNab, author and politician. Dr. McNab's death was unexpected and widely

mourned. He had none of the showy arts which help the politician to wide popularity. He was simply a straight man in whose honesty the public had unswerving faith. He was industrious to a fault, and his industry undoubtedly shortened his life. He will perhaps be best remembered as an historian. He was compiler of our "Official Records," had written several volumes, and had others in preparation. The Mitchell Library called him several times to Australia in his search for buried treasures in the literary line. At the time of his death he was Minister of Justice and Marine in the National Cabinet. He appeared to be the most likely man to lead the future Liberal Party when the parties sever the ties which bind them in the National Government—if that ever happens. His successor is now being discussed. It is hinted that he will be Sir John Findlay, a brilliant barrister, who has been twice unsuccessful at the polls, but who has seen Parliamentary service in the Legislative Council. If this prove true it is interesting. Sir John is brilliant enough and ambitious enough to lead a new party.



TRANSPORT DIFFICULTIES ON THE SERBIAN FRONT.

HISTORY IN CARICATURE.

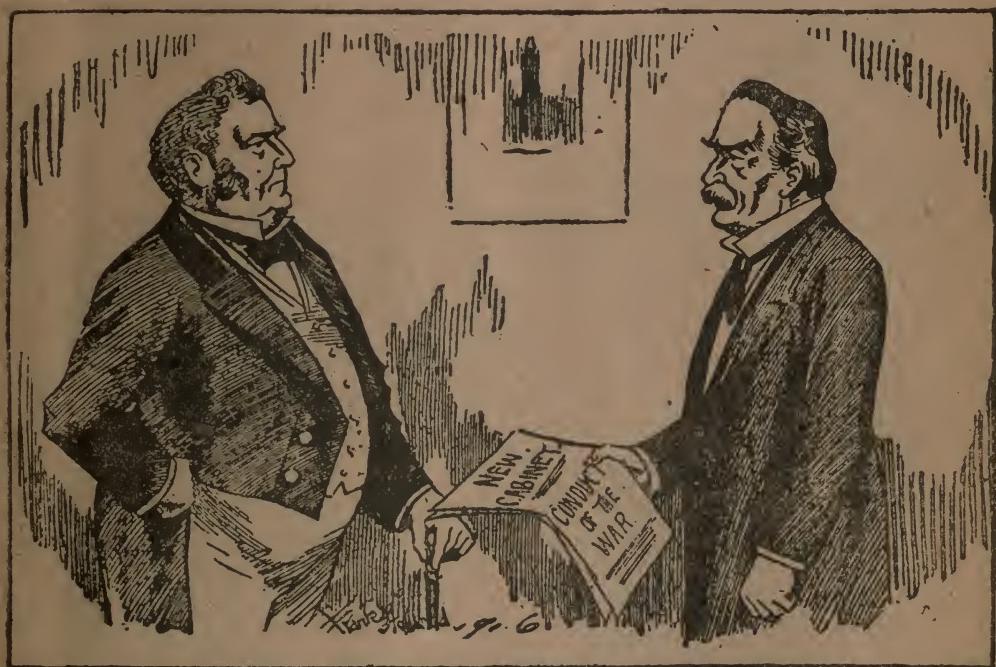
Oh, wad some Power the giftie gie us
To see ousels as ithers see us.—Burns.

The home papers naturally found in the recent political upheaval a fertile subject for caricature. Most of the cartoonists show great satisfaction at the change from Asquith to Lloyd George, but many suggest that the Welsh statesman has been called to the highest office to "do something." If he fails to do what is expected of him he will have to follow Asquith. The question one would naturally like answered is how many months' grace will he be allowed?

Presumably his fate, and indeed that of the entire Allied cause, will hang on the result of the great spring offensive.

Many cartoons still touch on the peace proposals of the Kaiser. Practically all the Allied papers depict them as being merely make-believe suggestions, and many of the American journals take the same view. A few venture to suggest, however, that for the sake of humanity, it is to be hoped they are genuine!

The Cape Times, which is usually so clever, has got on to a well-used idea in its Sword and Pen cartoon. That pen, or Wilson's typewriter, has figured in innumerable pictures which had as object the belittling of the President's efforts to pre-

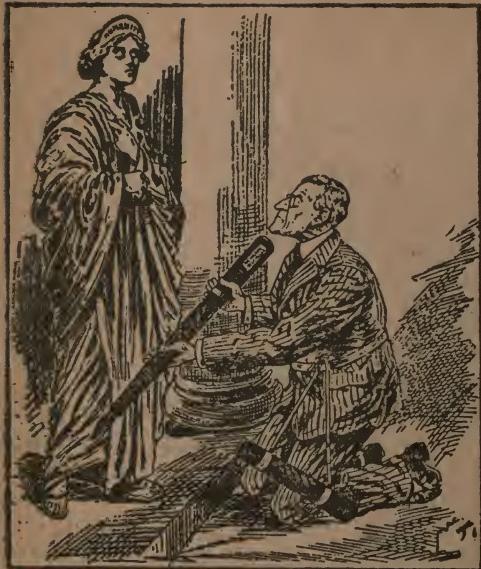


John Bull.]

JOHN TO GEORGE.

[London.

JOHN BULL: "This is your great chance. If you don't succeed, I shall take matters into my own hands."

*Cape Times.]***SWORD AND PEN.**

WILSON (to Humanity): "Madam, I can't find my sword, but did you ever see a finer pen?"

*[Cape Town.]***PASSING SHOW.**

BETHMANN VON HOLLWEG: "Pole, here is your new monarch—salute him, for he brings you freedom."

[London.]*Westminster Gazette.]***THE DOVE.**

BETHMANN-HOLLWEG: "Now, remember, you've got to look like a Dove."

[London.]



Reynold's Newspaper.]

[London.

THE NEW PILOT.

LLOYD GEORGE: "I have taken over the job in a rough sea, but we shall weather it all right."



News.]

[Dayton.

WILL O' THE WISP, OR TORCH?



World.]

[New York.

A STRING TO IT.



Record.]

[Philadelphia.

IS IT REAL?



Le Rire.]

[Paris.

THE REPLY: "That for your flag of truce!"



De Amsterdammer.]

POLAND THE GRATEFUL.

POLAND: "Long live William! He is giving us back our crown!"

The Passing Show suggests that the Germans only hope of victory lies in breaking

up the *Entente*, and shows the Kaiser vainly piping to the members of that Alliance.

The Spanish *Iberia* cleverly indicates the parlous state of the German meat supply, and *The Evening Post* shows that the Germans are not alone in needing food tickets to make the supply go round.

It is somewhat surprising to find in an Allied paper a cartoon of the nature of that reproduced from *Il 420*, published in Florence.

Le Rire often contains striking cartoons, and the two reproduced here are at any rate frank and to the point. The one shows the "cold footers" enlisting in the "starred" trades, the other suggests that a welcome form of economy, which is so generally preached in the abstract, would be an economy in speeches.

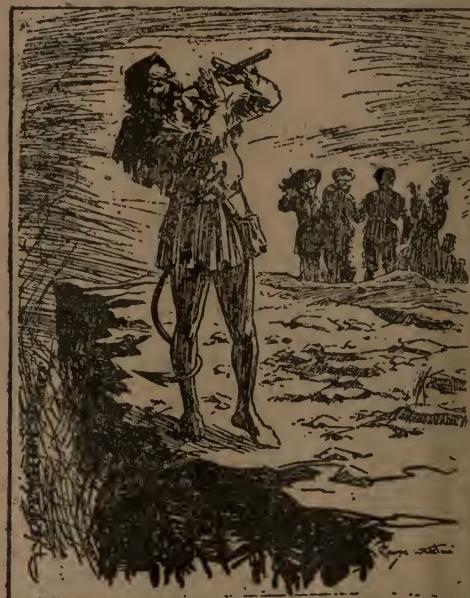


Mucha.]

THE BENEFACTOR .

[Moscow.

PRUSSIAN (to Poland): "Whether you like it or don't—you have got to be independent."



Passing Show.]

THE PIED PIPER OF POTSDAM.

THE KAISER: "Confound it! Despite my seductive tune not one of them will follow."



Iberia.]

[Barcelona.
THE FOOD CRISIS.

"Well, I can't eat the block, and the hatchet is too indigestible."



Evening Post.]

[New York.
HIS TURN.

España.]

[Madrid.

CROWN PRINCE: "Papa, they are all getting into line against us. Who will be their final ally?"
KAISER: "Our people!"



Il 420.]

[Florence.

ITALY ON ALLIES' DIPLOMACY.

While the Tiger (Bulgaria) chews, the Diplomacy of the Entente calmly discusses what is to be done for Roumania.



[Le Rire.]

THE VOLUNTEERS OF 1916.

[Paris.]

The announcement of the coming out of those exempted from military service has been postponed pending an enquiry into the magnificent enlistments in the exempted trades.

The cartoon from *Simplicissimus* is chiefly interesting because it reflects the German desire for peace.



[Le Rire.]

[Paris.]

WHY NOT BEGIN WITH THE SPEECHES?



[Simplicissimus.]

[Munich.]

THE FALLING STAR.

"Do you think, Fritz, that the French fellows opposite are wishing the same thing as we are?"

THE ENCHANTED CAPTAIN.

Under the above title Mr. George Patullo tells, in *The Saturday Evening Post*, how Pancho Villa "came back." For back he has come despite the requiems which were sung over him by too enthusiastic American war correspondents, who insisted that, wounded and broken, abandoned by his followers, harried by Uncle Sam's troops, it mattered not whether he lived or died, his star had set never to rise again! Yet a few short months later cables are telling us that he is again in the field sweeping all before him; that Chihuahua has surrendered to him; that Torreon is trembling at his approach; that his handful of devoted followers has been swelled to ten, to twenty thousand armed men; that Carranza, in dismay, has despatched his ablest general, Obregon, to try and stop his advance. But the people flock to *El Capitan Encantado*, whose return they regard as nothing short of miraculous!

Hasn't he come back from the very jaws of death, and, by the fire of his own genius and force, triumphed over the armies of the First Chief? He has. Was not the First Chief backed by the support of the United States? He was. And did not the Barbarians of the North announce, with blare of bugle and beating of drums, that they would get Pancho for what he did at Columbus, and scatter his forces to the winds? They did. Yet he is there in full view, with more than twenty thousand men under his flag, the virtual master of Northern Mexico. That is the way the Mexicans reason it out.

When one comes to examine the facts it appears a remarkable achievement for a bandit. What wonder the pelado holds Villa to be something more than man! What wonder that he looms almost supernatural to the ignorant peons! He is the one great hero they have, and when the chance comes they follow him. They are rallying to him by the thousands. Whoever fights Villa now, fights the very spirit of Mexico.

The Carranzistas would have the world believe that Villa is nothing but a picturesque bandit chief. In reality there is no faction in Mexico that can contend against him. Two agents, says Mr. Patullo, and two only, are capable of suppressing him—death and the American army. And until he is suppressed there can be no peace in that harried land. The Mexicans won't fight him. True, they can be led into action against him, but at the first chance it's *Viva Villa!* and they bang away at their own officers, and go joyously over to Pancho!

He is the only great military leader they have, and the idol of the masses. And, to give the devil his due, he is their only real patriot, whatever we may think of his methods.

Since September 1st Villa has acquired mastery of hundreds of miles of railroads and scores of towns; he has captured 50 per cent. of the rolling stock of Northern Mexico and holds whatever territory he desires. The bandit could have Juarez any day he wanted it, so far as Carranzista opposition is concerned; but he prefers not to take chances so close to the American forces at El Paso, Jimenez, Parral, San Andres, Chihuahua City—he takes them as he needs them, evacuating when he wishes to trap another enemy force. Perhaps by the time this is published he will have Torreon, too, with its rich stores of cotton and wheat and corn.

And now he has proclaimed his mission. It is to drive out the army the Barbarians of the North maintain on Mexican soil. He has summoned Mexico to rise and sweep them from the face of the earth.

It is a trump card to play. The average native hates the gringo worse than a Chinaman, and Pancho can get ten willing volunteers to fight the United States where one would respond for service against his own breed.

The manifesto he issued, in December last, makes interesting reading. It is directed mainly against the Americans, "the abhorred Yankees," but deals also with Carranza and his following:—

"Our beloved country has reached one of those solemn moments in which, in order to oppose ourselves to the unjustified invasion of our eternal enemies, the Barbarians of the North, we should be united. This has been done with the patient consent of the so-called Constitutional Government, which would like to build ammunition factories to continue the destruction of Mexicans with bloodshed, to make it easier for its leaders and allies to enter the interior.

"It is, therefore, a great and arduous task we must fulfil as Mexicans. I summon you to take up arms to overthrow the most immoral government we have ever had. . . .

"Without hope of seeing a change of conduct in the present rules of this country, I have the honour of stating to the Mexican people that from this date on I will have my troops enter in the most active way possible, and will start military operations to overthrow the traitors and to put at the head of the government any citizen who, by his recognised integrity and civic virtues, can put Mexico among the free and cultured peoples, a place legitimately ours. . . .

"No military nor armed citizen may be nominated for President, because the army has its own definite uses. There are no exceptions to this rule. . . .

"The revolution needing the resources of natives and foreigners alike for the reconstruction of the country, we will not be responsible for debts or claims made by foreigners. . . . All property of foreigners is hereby confiscated to the nation. . . .

"All railroad lines, with all their stock, are hereby confiscated for the use of the nation. Foreign companies which claim rights of property in the railroads will not be considered. . . . Mining properties of the country, which are owned by foreigners, will be confiscated also for the use of the nation.

"To stimulate the Mexican manufacturer and to increase industries generally all over the country, all mercantile operations with the United States are hereby suspended. All rail and wire communication will be eighteen miles below the international boundary, to enforce this provision.

"All military chiefs are urged to require all male inhabitants of their respective territories to take up military training, to be prepared for the great struggle with the invader. Those who refuse will be declared traitors and shot, their property being confiscated."

All of which makes it look as though the Enchanted Captain were organising for a real struggle.

Mr. Pattullo tells of the eclipse of Villa, and narrates how he "came again." Villa's final downfall dated from the day on which Washington recognised Carranza at the head of the Government. This was followed by the granting of permission for the transport of the First Chief's troops across United States' territory for the defence of Agua Prieta, then being attacked by Villa. Thanks to this move, he was badly defeated before the town, and, realising he was up against it, Villa made a speech to the people of Chihuahua from the balcony of the National Palace, which was virtually a farewell.

"You are sick of me now," he said. "You are exhausted and miserable. You do not want any more fighting. I leave you. But don't forget this—the man you hate at this moment will be back within nine months. I will never desert my country. I have never fought for personal enrichment, but for the people. Therefore, I will come back. Hear me! I will answer your call in the hour of need."

He is always picturesque in what he says, and has astounding magnetism to drive home his words. The people huzzaed and Villa went off to Bustillos, to which point he had summoned his forces for disbandment. They came from all the surrounding region, nearly eighteen thousand men.

There he released them for a period from his service, and bade them good-bye. They were passionately devoted to him; but they

had, also, had their fill of fighting and privation, and were eager to be gone.

They broke up, but not all of them departed with their equipment. Some, operating under powerful chiefs, went off as units; but the majority, thus assembled to take leave of Villa, laid down their arms.

He buried in the vicinity of Bustillos twelve thousand rifles, eight light cannon, some machine guns, and nearly two million rounds of ammunition. They would need them later, he explained. Foresight is one of Pancho's most valuable assets.

Then he departed to his old haunts, and with a few faithful followers, resumed his former occupation of a bandit. One day, though, overcome with sudden rage against the Americans, to whom he rightly credited his downfall, he swooped over the border and attacked the American town of Columbus. United States cavalry were after him at once, but apparently they never came near getting him until after he had been severely wounded when he captured Guerrero, a place he took in order to get ammunition and supplies, a favourite dodge of his. Why bother about buying arms, says he, when we can get all we need from the Carranzistas? A soft-nosed bullet from a Mexican soldier's rifle struck him below the knee, fracturing the bone in three places.

His followers took him into the house of Senor Fernando Gonzalez, where his leg was dressed. Then they put him in a buggy and took him into the Sierra Tarahumar by easy stages. There he was concealed by the Indians.

While he was in hiding, the forces operating under his flag split up under various leaders, and went off to prey where they thought the pickings would be easiest. The Carranzistas saw their chance and grasped it. If they could announce that Pancho Villa was dead and convince the Americans of it, perhaps the expedition would be withdrawn. At any rate, it would help their cause enormously to make people believe that he had been killed, and they set energetically to work on the job. The elimination of Pancho made their own task of pacification immeasurably lighter and gave them a weapon to use in negotiations with Washington for the hobbling and gradual retirement of the pursuing army.

All the while he was in the region of Guerrero, being nursed by the Tarahumar Indians.

Gossip and rumours were flying like wild fire over that country concerning the American column under Pershing. Word reached Villa that a force was approaching Guerrero, and he ordered that he be taken up into the mountain fastnesses, where Julio Acosta, one of his former generals, had his retreat. Two youths accompanied the wounded ban-

dit on this trip—Juan Murga and Javier Hernandez.

Before they had gone far the rapid advance of a detachment of Dodd's cavalry surprised them. The two attendants fled, taking everything belonging to the wounded man, and leaving him alone with a horse. Villa was in bad plight. The Barbarians of the North were close upon him, and he might be discovered any minute. In this extremity he turned his horse loose and hid in a cave. From there he saw about fifty troopers ride by. They passed within ten yards of him. He has since asserted that he also witnessed from his cave an engagement between the American troopers and some Mexicans.

Villa dared not venture out, lest he be seen and taken. He remained in the cave three days, without food, and suffering horribly. His leg swelled and turned black. Murga and Hernandez had left him without water, and he was almost unconscious a considerable portion of the time.

Then up to the cave, on the third day, came Nicholas Fernandez with a stretcher. Some Indians had advised him of the chief's hiding place. Fernandez and his men carried Villa towards Bachiniva, which town they circled in order to avoid the Carranzista garrison; on to El Royo, nothing more than a plantation, where the mother of Tomas Morales, one of the nine men who made up Villa's first army, dressed his wounds. Morales was killed in a fight against the Federals in 1913; Pancho was much devoted to him.—

As soon as could be they moved on to Rubio. Followers joined him every hour. They had to cross a plateau miles in extent, which was bare of shelter of any description. Not a gulch or a tree offered screen; but they accomplished it, moving in the dark. They reached San Antonio de Orenales, and then took refuge at a small ranch near the Bustillos Plantation.

Here they were unexpectedly set upon by a force of Carranzistas during the dressing of Villa's wound. He had only fifty men with him. While these went into action, to hold off the enemy so that he might escape, a woman and an ancient man of the neighbourhood carried the bandit on a stretcher into a dry arroyo. There he was found later by his followers, who took up the stretcher and headed into the dense forests that have their beginning near Bustillos.

They climbed up into the Sierra Madre and left him in charge of Indians. He remained concealed near the Chihuahua-Durango line, and then changed his hiding place to the Nonqava region, north-west of Parral.

At this time Villa's condition was really serious. Gangrene had set in. But the Indians undertook to cure him with herbs, and he had faith in the treatment. The Tarahumaras of the region have a tremendous reputation for healing with boiled herbs. They even claim to possess a cure for cancer.

Recovery in Villa's case was slow and painful.

He had several relapses. A Jap., who had been a cook in Villa's official family when he was at the pinnacle of his power, nursed him under direction of the Indian herb specialists.

That the treatment failed to come up to expectations is proved by the fact that Villa realised toward the end of April that he would need skilled medical attention to save his leg—and perhaps his life.

One day a physician of Parral was called to Pilar de Conchos, ostensibly to attend the wife of a man employed by the Boquillas Electric Company. He was taken to a small house, where he found a wounded soldier, wearing a thick beard. The doctor recognised him as Pancho Villa. He had been shot below the knee in the right leg, which was in bad shape, as the bone had been shattered, and he had apparently gone a considerable time without the attention it needed.

The wounded man asked the doctor to make regular visits. This he could not afford to do, since the distance from Parral was too great. Accordingly Villa was moved to the village of Minas Nuevas, not far from Parral, and lay there in a tiny ranch house until the latter part of May, the physician making frequent trips to dress his wounded leg.

He was in hiding there, and a helpless cripple, when the force under Major Frank Tompkins, of the Thirteenth Cavalry, had their fight with the Mexicans at Parral. Carranza forces were close to his retreat constantly. At the time the American troops passed from Balleza back to Parral, Villa was watching their movements as they went along the road.

Under proper medical care Villa gradually improved. He gained strength and weight, and immediately he began to chafe for action.

The people, however, believed he was dead, the Carranzistas' campaign to this end having been successful. When, however, he was seen still alive, he was hailed with wild enthusiasm, and quickly gathered a large following. By means of audacious tricks and ambushes, he defeated all the forces sent against him. Town after town surrendered or was captured, Villa's whirlwind tactics electrifying his followers and paralysing his opponents. There is no doubt about his great military ability, although it is intuitive and bound by no text book. He is a born leader of men, and, despite his wild deeds, manages to attach great and small to him with bonds of admiring affection. His capture of Chihuahua was entirely typical of his methods. He approached the place under the guise of expected Carranzista reinforcements.

By this victory Pancho obtained thirty-two cannon of the 75-millimetre kind, five of which were disabled, however; seventy-

five machine guns, and seven thousand rifles. He also dug up a great quantity of ammunition that had been buried in the cellars of the Federal Building.

The bandit was in his glory. He worked like a ninety-horse-power engine, and soon had Chihuahua organised. There was some promiscuous looting and he had five of his followers executed. Any looting there may be he wants done systematically and in order, and proposes attending to it himself.

During the few days he held Chihuahua City nearly a hundred Chinamen were murdered. And Villa looted like a medieval freebooter. Whole trainloads of food and medical supplies, hay, forage, and gasoline were sent out daily.

Reinforcements, under Murguia, finally came up and Villa evacuated the city.

Though the reasons for his evacuation are not known, it is probable that the bandit's rooted antipathy to defending a place prompted him to move out. He distrusts that method of fighting. His theory is that the advantage lies with the attacker, and,

unless in overwhelming strength, he prefers to let the other fellow hold a town; then when he needs it he will take it.

By withdrawing to Fresno, only seven miles distant, he enticed Murguia into the capital, which is exactly where he wants him. At this writing Villa is striving to wipe out Murguia's force there. That done, he will have all clear behind him for a march on Torreon, which he will very likely take before this is printed.

Where will he end up? One guess would be as good as another. But it is certain that he will dominate the Mexican situation while he lives, and that when Villa dies, he'll die with his boots on.

It is worth bearing in mind that, during the height of his power, after he had occupied Mexico City in 1915, Villa could have made himself President, but steadfastly refused so to do, for, as he himself says in his manifesto, no one connected with the army ought ever to occupy the position of chief magistrate of the Republic.

THE BRUTAL ANGRY MACHINE GUN.

Captain Henri Carre writes a most interesting article in *La Revue des Deux Mondes* on "The Modern Machine Gun." He sketches the evolution of the rapid-fire gun from the old many-barrelled mitrailleuse to the modern weapon which the Germans have taught us how to use. Though superior during the first few months of the war in many arms, it was in machine guns that the Germans did most principally put their trust, and it has taken us two years, or more, to catch up to them in this weapon—if even we have yet caught up. When the enemy mobilised, the very numerous units of the German machine gun sections were completely organised. They had three or four times as many of these weapons to a brigade as did either French or British.

The teaching of the Balkan wars, which in France had not been sufficiently harvested, had shown that the presence of machine guns in battle was, for infantry, not only a powerful material help, but also a considerable moral support. Thus the Germans began the war with thousands of machine guns. This weapon exactly fits their temperament; an automatic weapon responds to their immoderate love of mechanism and to the mechanical training of their soldiers.

The German machine gunners, says Captain Carre, are all picked men who develop a peculiar mentality and pride. "They show in battle real bravery, and often ex-

traordinary ferocity." Numbers of them have taken an oath never to surrender under any circumstances and fight on to the death even when surrounded. But whilst the machine gunners are daring, brave and skilful, the German bombers cannot be compared to the French and British.

It has also been noticed that the bravery, the coolness, the daring and skill of the German machine gunners contrasts with the timidity and often the awkwardness of their bomb throwers. The French and English grenadiers show themselves in general very superior to the Teuton bomb throwers, without doubt because the use of the machine gun is especially suitable to machine soldiers, that of hand weapons, on the contrary, appealing to the individual valour of the combatants. But it must be recognised that, as machine gunners, the Germans are pastmasters in their brutal art.

The Germans use a Maxim model machine gun. It is water cooled, easily transported, and has unrivalled rapidity of fire.

The machine-gun companies consist of mounted officers and under officers; further, the caissons drawn by horses can advance at a trot, while carrying the gunners and temporarily leaving behind the extra men. This makes clear that one of the aims of the German command has been to bring the machine guns very rapidly into action, and when necessary to make them go ahead of their infantry.

The Germans do not use pack animals to carry the gun. It is dragged, already mounted, on a caisson, or, when possible, is transported by motor car. A loading ribbon of pliable cloth, carrying 250 cartridges, is used.

The barrel of the weapon is surrounded along its whole length by a metal sleeve filled with water to cool it; at the end of 600 or 800 shots the liquid begins to boil, causing an escape of steam, which interferes with the firing, and reveals the presence of the gun, unless directed towards the earth or into a vessel of water. During the mobile period of the war, and by one of the ruses they are so fond of, the Germans sometimes made use of this peculiarity to make us think imaginary machine guns were at certain points; they generated steam by burning damp grass.

The French use three models : The Saint-Etienne (1907), the Puteaux, and the 1914 Hotchkiss. The principal driving power of the first-named is obtained by drawing gas from the barrel through a hole 4.8 millimetres in diameter.

This gas enters a cylinder called the gas chamber, and later escapes into the air by appropriate apertures : the piston at the end of its movement is driven back by a spring. It is a to-and-fro movement which automatically brings about the complete action of the weapon, namely, the opening and closing of the breech, with extraction and ejection of the cartridge case; the percussion and release of the cartridge; the feeding of the gun. The weapon can be fired at any rate, either at rapid fire or at a rate regulated by a special apparatus which permits all rates, from ten to about 500 a minute. The feeding is carried on by stiff strips of nickel steel carrying twenty-five cartridges.

It is not provided with a water jacket, consequently the barrel gets very hot. In fact, during intensive fire, it glows red, but this heating does not injure the weapon's ballistic qualities, the barrel being made of special manganese steel. For firing the gun is fixed to a tripod, and can be used in two positions—normal and lying down. In the latter case the gunner lies on his back, in the former, he sits on a saddle fixed to the pole.

The problem of transporting the machine gun is most important. In order to make it an infantry weapon, fit to accompany the infantry everywhere, efforts have been made to find the best possible solution for it. Along roads, on long marches, the machine guns are carried on pack saddles or on carts. Under fire, or under threat of fire,

the pack saddles or carts are abandoned, and the parts of the machine gun are carried on men's backs or by hand. The guns have to be assembled in order to be ready for firing.

Rapidity of fire is, of course, the characteristic of a machine gun, and theoretically they can despatch from 400 to 700 shots a minute. These rapid rates apply, however, only to the actual firing of a cartridge strip, which has been put in position. It takes some little time to change from one strip to another.

In reality, when a machine gun fires 400 shots within a minute, this would seem to be a maximum; it is, besides, a prestissimo movement, which we may try to represent to ourselves by a rate of seven shots a second. From the tactical point of view there is nothing to be gained by increasing this rate, and it is rarely justifiable to fire longer than a minute without stopping at the same target.

One would assume that a machine gun would send all its shots along the same path, could, that is to say, cut a straight line across a target, but this is just what it does not do.

In reality, as a consequence of the vibrations of the gun and the play of the parts of the aiming machinery, it is not so; each of the bullets describes its own curve, and their ensemble makes a sheaf, closely packed but very narrow, which may be compared to the stream of water sent out by the nozzle of a hose. In the mowing fire, which is the normal fire, a certain number of sheaves are juxtaposed along the whole front of the objective. From this it results that at the point where they strike the earth the density of the bullets is terrible, and an extraordinary effect of destruction of the unsheltered men is obtained. The effect of machine-gun fire on armour plate or obstacles is the same as that of gun fire. On barbed-wire entanglements a serious but very localised destruction is obtained by firing several thousand cartridges close together.

The reason why the machine gun is so popular with the Germans is because it allows great economy of men in the front, one of these weapons being equivalent to a dozen riflemen. Although there is a good deal of mechanism in all makes of machine guns, they are pretty reliable weapons. Delicate parts may be broken in firing, but substitute pieces are always provided, and a skilful man can effect necessary repairs in a few moments.

PEACE WITHOUT HONOUR.

Plenty of people have been drawing up peace terms—on paper—during the last few months. The minimum demands of the Allies have been varyingly set forth by those whose ignorance of their subject is the best claim they have to write on it, and also by men of affairs, and now and again by responsible statesmen. Most of these folk insist upon the payment of heavy indemnities, and couple that with a demand that Germany shall be commercially outlawed after the war.

Occasionally we find some sensible contribution to the subject, such, for instance, as that of Edwyn Bevan in *The Nineteenth Century*, but more often the forecasts of peace terms bear large on their faces the impossibility of their realisation owing to the insistence on conditions which mutually destroy each other, as the payment of indemnities and the boycotting of Germany, and so on and so forth. After perusing much trash of this nature, it was with great joy that one came on an article by Lord Esher in *The National Review*, entitled "The Black Eagle's Feathers." That feeling, however, rapidly evaporates when the conclusions of the noble Viscount are read. One's disappointment is all the keener because Lord Esher is one of the greatest men in England, or, indeed, in any country; a statesman of no ordinary type, one whose influence is immense, though his name is hardly known to the man in the street.

Lord Esher sets forth the terms on which, only, peace may, in his opinion, be granted to Germany. But to secure such terms we would have to crush our way to Berlin. Before they would listen to them the Germans would have to be absolutely starving, utterly beaten in the field, for they would mean the entire disappearance of the Germanic nations from the ranks of first-class powers, would make of them subservient peoples, who, for centuries, would have to labour in bondage, scheming for revenge on those who had brought them to such a pass.

First of all, he says, there must be reparation for damage inflicted on every invaded land, and the repayment of all expenses incurred by the Allies on account of the war. Further, there must be repayment in kind. All plant and furniture and works of art destroyed or stolen must be replaced by plant and furniture sent from the towns, villages and art galleries of Germany. Pending the resumption of production in French

and Belgian mines, an equivalent amount of minerals must be handed over from the German mines. Every ton of shipping destroyed must be made good from Germany's mercantile marine.

It is generally agreed, says Lord Esher, that all the losses and expense caused by the war in the Allied countries, plus the sums demanded from the Central Powers in reparation, should form one grand unified total, which should take the form of a single loan or stock. He does not attempt to calculate what such demands, losses and expenses would total, but we can get some idea by taking merely the actual cash spent by the Allies on the prosecution of the war. That amounts already to some £8,000,000,000, and is being added to at the rate of £14,000,000 every day, or some £5,000,000,000 a year. With the very greatest effort it would be impossible to utterly crush Germany by the end of this year, but, assuming it could be done, the minimum amount of that single loan Lord Esher speaks about would be £13,000,000,000. If to this we add the full reparation charges for damage done, etc., we would get a sum not far short of £20,000,000,000! This, according to Lord Esher, would be regarded as a debt on which yearly interest would be paid, a debt the amortisation of which would extend over a hundred years. The annual interest alone on that colossal sum, reckoned at 4 per cent., would be no less than £800,000,000. Says Lord Esher:—

Germany would not be ruined. The European nations, looking to their own interest, would not wish to ruin 120 millions of consumers of the products of the world. But the German people would have to work in order to live and pay their debts, and work hard and long. Many years would pass before Germany would be able to re-establish a financial and military position that would enable her to threaten once more European peace.

All the same, no power on earth could keep the Germans in Germany. They would certainly fly the country to escape the terrific taxation that would be imperative, and the only way in which they could be kept in the necessary servitude would be to blockade them as they are now blockaded!

Lord Esher then goes on to discuss the question of securing the Allies against the danger of Germany waging a commercial war of intense fury. To avoid that threat certain terms, he says, must be agreed upon beforehand, at the point of the sword, be-

fore any armistice is granted. These terms in brief are :—

The occupation of Heligoland and of all the principal enemy ports.

The closure of all enemy military and naval arsenals.

The cession of the Austro-German fleets to the Allies.

An embargo upon all ships of the mercantile marine owned by the Central Powers.

An embargo upon the export of all enemy's goods.

The immediate repatriation of all Allied prisoners of war.

The retention by the Allies of 300,000 German prisoners for the purpose of repairing the damage done in Northern France and Belgium.

The immediate reimbursement of the price of minerals stolen by the Central Powers during the course of the war; the repair of damaged mines in France and Belgium, and a supply from German mines of minerals that cannot for the moment be obtained from French and Belgian sources, based upon pre-war figures.

The cession to the Allies of all stocks of material accumulated in America and elsewhere by Germany in view of the immediate resumption of commerce after the war.

Cession to the Allies of the Austro-German mercantile marine, ton for ton, for the ships torpedoed or destroyed by the Central Powers.

Lord Esher does not suggest that this category is complete. "Some conditions that are vital may have been omitted." Territorial changes, for instance, have not been included. Still, these minimum demands are enough, in his opinion, to go on with. They must be agreed to before fighting ends. The other matters can be discussed when the armistice is granted to the Central Powers. Lord Esher does not suggest when the war is likely to be ended—on these terms!

Lord Esher would do well to read over Mr. Bevan's article in *The Nineteenth Century*, entitled "Common Sense About Peace." There are in England, and in Germany, he says, three groups: Jingoes, Moderates, and Pacifists. The Pacifists declare that neither side can win a decisive victory now, and, therefore, urge the making of peace without any further loss of life and treasure. The Jingoes and Moderates on both sides declare that the end of the war will be a victory for their country. If, says Mr. Bevan—who is himself a Moderate—you hold the view that neither side can win you must want to make peace at once:

However unsatisfactory a conclusion to the war a draw would be, no sane person would

want to go on with it, if he were once convinced that all further sacrifices and efforts would fail to make it anything else but a draw. If we have got to put up with the evils of a draw in the end, we may as well save more futile loss.

He illustrates the different ways of using absolute victory. In 1866 Prussia smashed Austria but imposed terms of singular moderation, and the Austrians are fighting side by side with the Russians to-day. In 1871, Germany smashed France, demanded a great indemnity and tore away regions French in feeling and by the traditions of many generations. France in consequence nursed strong feelings of revenge. He goes on :

A conclusive victory in this war would leave it possible for us to make every concession to German sentiment and German needs which contributed in our judgment to the best and most enduring settlement of Europe.

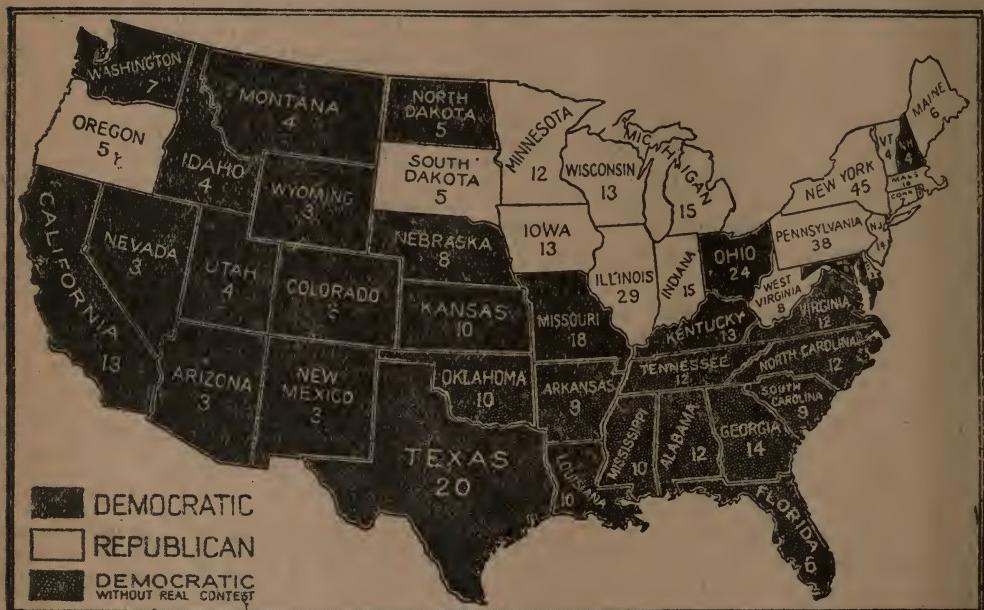
He points out that the resistance of the German people seems to have been stiffened by their being assured that it is the intention of the *Entente*, if victorious, to dismember Germany:

If it is not the intention of the Allies to sever from the body of the German Empire any country with a predominantly German population, one would think that it would be a good thing that they should say so. To allow it to be thought from the utterances of a few irresponsible individuals, which pass uncontradicted, that this is their intention, if it is not their intention, can it do anything but serve the purposes of hostile propaganda? . . . To attempt to cut off from Germany after the war the essentials of a healthy national life would be to commit a worse mistake than was made by Germany in the matter of Alsace-Lorraine. The British people as a whole would ultimately gain, not lose, by the industrial recuperation of Germany after the war. If it is no part of the intention of the Allies to hinder that recuperation, it is a pity that the great mass of the German working class should be kept firm in their will to fight by being told that this is the intention of the Allies. . . . An absolute security that the Germans could never do harm to us again we could only have if the Germans were all killed. And the killing of all the Germans goes, I think, beyond the war aims even of the "National Review."

Final security can only be obtained, in his opinion, in the absence of ill-will, and that should be borne in mind when we are in a position to dictate whatever terms of peace we like.



STATES (WHITE) IN WHICH WOMEN HAVE THE VOTE.



HOW THE PEOPLE VOTED AT THE PRESIDENTIAL ELECTION

Map shows each State's electoral vote.



CATECHISM OF THE WAR—XXXVI.

Q.—Have women votes in the United States?

A.—In some of the States, not in all. Thus it comes about that, at the last Presidential election, women voted in twelve States only. They had not the suffrage in the 36 others.

Q.—Have they had the vote long in these twelve States?

A.—The accompanying map gives the dates on which woman suffrage was won in each of the States. It is interesting to note that Wilson carried ten of these at the last election. It is, however, asserted that the women's vote made really very little difference in the result. In Illinois the ballots of the women and the men are counted separately, and it was found that the vote of the women was divided in almost exactly the same ratio as the vote of the men. All the same, it is notable that Wilson carried California by 3278 votes only, and that the women voted there for the first time. Had Hughes carried this State he would have won the election, despite the fact that Wilson would still have had a plurality of more than 500,000 in the whole of the United States.

Q.—How did the voting go finally?

A.—8,577,613 people voted for Dr. Wilson, and 8,164,410 for Mr. Hughes.

Each State is, however, regarded separately, having a number of votes allotted to it in the Electoral College, proportionate to its population. California has 13, and had a couple of thousand people in that State voted for Hughes instead of for Wilson, it would have given the former 268 votes in the College to Wilson's 263. As it was, by winning California Wilson got 276 votes to Hughes's 255. Wilson carried far more States than did Hughes—30 out of a total of 48—that is well illustrated in the accompanying map—but the Republicans won in the most densely populated States, which have the greatest number of votes in the Electoral College: Illinois 29 votes, Indiana 15, Massachusetts 18, New York 45, Pennsylvania 38. The Democrats by winning Ohio got 24 votes, and by carrying Texas got 20, but others they won had far fewer votes.

Q.—Was prohibition carried in many of the States?

A.—Four more States were carried at the recent election, and two, Utah and Florida, will also go "dry," but by a different procedure. The other States are amending their constitutions to bring prohibition into effect, but these two will carry it out by legislation in the local Parliaments. Alice

gether, then, there are now 25 States which have mounted the water waggon. The accompanying map shows the advance made.

Q.—Were the French soldiers who fought on Gallipoli conscripts or volunteers?

A.—They would certainly be conscripts, but some of them may have been conscripted men who volunteered for that particular campaign. That is to say, volunteers may have been called for, and may have offered from various regiments, but the numbers required would have been obtained in any case whether there were volunteers or not. You are probably thinking of the French Colonial Army, which is recruited by voluntary enlistment. In times of peace 27,500 men of this army are permanently maintained in France. In addition 18,000 French soldiers of this army are in the colonies, and 35,000 native troops. Algeria is garrisoned by 40,000 men of the regular "conscript" army, and 27,000 native conscripted troops.

Q.—Which ships did Japan give back to Russia?

A.—The ships "retroceded" to Russia were the battleships *Sagami* (ex-*Peresvet*) and *Tango* (ex-*Poltava*), and the cruiser *Soya* (ex-*Varyag*). These were all captured in the war of 1904-5. The *Soya* recently visited Australia.

Q.—Was the von Moltke who was chief of the German General Staff when war broke out the son of the famous Field-Marshal Moltke who led the Prussian armies against France in 1870-71?

A.—No, the von Moltke who was Chief-of-Staff in 1914, and who died recently, was a nephew of the great strategist, Count Helmuth von Moltke, who defeated Austria in 1867 and France in 1870. This Field-Marshal, who remodelled the German army, was born in 1800; was, therefore, 70 years old when France and Prussia went to war.

Q.—How long has conscription been in force in Russia?

A.—It was introduced in 1874, after the Franco-Prussian war. At first a six years' service was required, but this has been reduced to three in the infantry and to four in the cavalry and artillery. There are many exemptions, though. In fact, on paper, the war strength of Russia is not more than 4,575,000 men. When more are required they have to be conscripted and trained.

Q.—When was the Battle of Waterloo fought?

A.—It was fought on Sunday, June 18th, 1815, between Napoleon, with 72,000

men (246 guns), and Wellington, with 67,700 Allies (156 guns); but the day was decided by the arrival of Blücher with 50,000 Prussians (104 guns). There were in all only 24,000 British on the field. They lost 2000 killed and 4000 wounded.

Q.—Could you tell me what is the family name of King George V.?

A.—As the dynasty of King George I. still reigns in England, and as he was a member of the Guelph family, King George V. is presumably a Guelph. The descent though came through the female line—Queen Victoria—whose husband, Prince Albert, was a member of the great Wettin family, from which many of the Royal Houses of Europe have sprung. Had he not, therefore, been of royal blood, King George V. would be regarded as a Wettin, not as a Guelph. It is interesting to note that the name Guelph was associated more particularly with Italy than with Germany, and for centuries the feud between this house and the Ghibellines raged throughout northern Italy. In fact Guelph is the Italianised form of Welf, and Ghibelline is the Italian name for Waiblingen. The feud is said to have originated in 1140 in a war between Conrad III., King of Germany, and Welf, Count of Bavaria, whose soldiers used the battle-cry, "Hie Welf." To this the King's men replied with the shout of "Hie Waiblingen," one of the titles of Conrad, who resided at a castle of that name.

Q.—Could you tell me whether the additional 2s. 6d. per week which Mr. Asquith promised certain old-age pensioners has yet been paid them?

A.—Payments began in November last, and over half-a-million pensioners had at that time applied for an additional allowance. Naturally inquiries were being made, and it would be some time before the authorities could go through all the applications.

Q.—How many old-age pensioners are there in Great Britain?

A.—On March 31st, 1915, there were 984,131; of these 369,365 were males and 614,766 females. The great majority—in fact, 931,344—were receiving 5s. a week; 19,366 were getting 4s.; 19,443 3s., and 9238 2s. only, whilst 4740 were in receipt of 1s. Pensions are not payable in Great Britain until the age of seventy is reached, and only those are entitled to them who have an income of less than £31 10s. per annum. The annual cost of pensions before the 2s. 6d. was granted was

£12,710,000. In view of the fact that the cost of food at home has gone up pretty nearly 100 per cent., the distress amongst the pensioners, the majority of whom have nothing but the 5s. per week, out of which they often pay rent, can well be imagined.

Q.—Have definite particulars of German prisoners of war in England yet been published?

A.—The latest available information was given in the British Parliament on November 14th. At that time there were 42,915 military officers and soldiers, and 2115 sailors. On the same date it was stated that there were 29,764 British soldiers and officers in German hands, including the Indian forces, and 1337 sailors. In addition there were the troops taken in Mesopotamia by the Turks, who have, however, been retained in Turkey.

Q.—What are the boundaries of the barred zone in which the German submarines are sinking ships without warning?

A.—The map published last issue was fairly accurate, although definite particulars of the blockaded area are not available. The line runs from the Terschelling lightship on the Dutch coast, northward to Udsire Island, off the Swedish coast—a distance of 360 miles; thence north-west to a point 62 N. lat., 5 E. long—360 miles; then due W. along lat. 92 to long. 10—140 miles; thence S.W. to lat. 61, long. 15—160 miles; thence S.W. to lat. 57, long. 20—280 miles; thence S.S.E. to lat. 47, long. 15—620 miles; thence S. along the 15 long. to lat. 43—240 miles; thence E. to lat. 44 and long. 2—740 miles.

Q.—Is it true that Great Britain produces only one-third of the wheat her people need?

A.—Only about one-fifth of the wheat consumed in the United Kingdom is grown there. About 60 per cent. of the meat needed is produced there, and about 35 per cent. of the butter. It is, therefore, a matter of some concern if pasture land be broken up to grow wheat, as cattle would decline in numbers, and there would be less butter produced. Meat is at present the most costly import, then wheat, and then butter. Before the war these were respectively, £55,300,000, £50,200,000 and £24,100,000. During the last two years there has been a shortage of agricultural labour in England, and the yield of wheat per acre has dropped from 32.43 bushels in 1914 to 29.06 in 1916.

Q.—How much grain does it require to feed Great Britain?

A.—It is estimated that 149,400,000 cwts. of wheat are consumed every year, or an average of 364 lbs. per head per year. Of this amount about 33,000,000 cwts. would be grown in the United Kingdom.

Q.—From where does Great Britain draw most of her supplies?

A.—She obtained the following supplies of wheat in 1913, 1914, and 1915 in cwts. :—

Place.	1913.	1914.	1915.
U.S.A. ...	22,000,000	34,200,000	41,600,000
Argentina ...	16,000,000	6,500,000	12,200,000
India ...	21,500,000	10,700,000	13,900,000
Canada ...	10,000,000	31,500,000	19,700,000
Russia ...	10,700,000	7,200,000	800,000
Australia ...	12,000,000	12,100,000	200,000
Roumania ...	896,000	343,000	nil
Chile ...	511,000	51,000	nil

Total ... 102,607,000 102,594,000 88,400,000

This would seem to suggest that during 1915 England must have drawn on her stores for at least 14,000,000 cwts., must therefore have begun 1916 with a more slender margin between importation and consumption than is customary.

Q.—How much wheat do the people of Great Britain require every day?

A.—They need 3,000,000 cwts. a week, of which 600,000 is produced locally. In actual fact, of course, if there is a hitch in imports the home-grown wheat is at once called upon. This would suffice to feed the people for two and a-half months, and when it was consumed 3,000,000 cwts. weekly would have to be imported.

Q.—Have there been heavy imports during 1916?

A.—The imports for what is called the harvest year (Sept. 1st, 1915, to August 31st, 1916) were practically the same as for the previous one, 1914-15, viz., 106,000,000 cwts., as compared with 110,000,000 cwts. for 1913-14, but the home production was 41,500,000 cwts., as against 31,300,000 in 1913-14, and 36,700,000 cwts. in 1914-15. During the last five months of 1916, viz., from June 17 to Dec. 16, the imports were as follows:—

	June 17- Dec. 16, 1916. Cwts.	June 17- Dec. 16, 1915. Cwts.	June 17- Dec. 16, 1914. Cwts.
Imports ...	40,271,200	50,897,000	64,502,300
Home grown ...	18,416,500	16,050,600	17,876,300
Total ...	67,687,700	66,956,600	82,378,600

It would seem therefore that the imports during 1916 were a good deal behind those of 1914.

Q.—You suggested, some time ago, that the reason Great Britain was not drawing great supplies of wheat from Argentina was not owing to failure of the crop there. Has your assumption proved true?

A.—It was announced some months ago that the Argentina wheat crop was exceedingly poor, but actually it must have been a great harvest, for it is stated that, at the end of November, there were about 20,000,000 cwts. of exportable wheat in the country. During the first nine months of 1915 Great Britain obtained 12,161,000 cwts. from Argentina, but during the first nine months of last year she got only 3,259,700 cwts. Yet for all that the wheat was available in the country. It is worth noting, too, that during those nine months India sent only 814,000 cwts. compared to 13,835,000 cwts. during the same period in 1915.

Q.—Was last year's world yield of wheat less than that of 1915?

A.—About 240,000,000 cwts. less than that of 1915; at least, that was what the experts said it would be. The United

States' yield was, however, some 20,000,000 cwts. greater than expected. Still, there is a notable shortage.

Q.—Is the home land getting supplies from India?

A.—The Indian Government was arranging for the export of over 8,000,000 cwts. during November and December last, and it is announced, in home papers, that this supply, together with the quantity bought in Australia, will feed the people for at least nine weeks. Wheat which was selling in 1913 at 31s. 2d. a quarter is now selling at 73s. 2d., so that Great Britain will have to find no less a sum than £120,000,000 for the wheat imports of 1916, which, in 1913, cost her only £50,200,000.

Q.—Was the wheat crop in France good last year?

A.—Owing to the withdrawal of practically all the agricultural labourers the crop was considerably less than the average, and France in consequence will be obliged to import considerable quantities of grain. A good deal of the 8,000,000 cwts. from India, mentioned above, will go to France, and also to Italy, always a large importer of wheat.

Q.—Can you tell me how many men have enlisted in Ireland since the outbreak of war, and how many men still remain there who are available for service?

A.—An official statement was issued re-

cently giving particulars about Irish enlistments, and details of the position in each province were given in the following table:—

Province.	Men of Military Age.	Men considered Indispensable.	Men enlisted since National Register.	Estimated Physically Unfit.	Estimated No. Available for Service.	Men Enlisted since outbreak of War.
Ulster	169,477	79,214	14,922	30,136	45,205	66,674
Munster	136,037	59,939	5,461	28,495	42,742	21,070
Leinster	101,936	46,409	4,165	20,544	30,818	15,636
Connaught	81,392	45,717	1,502	13,699	20,504	5,440
Total (excluding Dublin Metro. Police area) . . .	489,442	231,279	26,050	92,844	139,269	108,829
Dublin Metro. Police area (estimated) . . .	58,385	14,596	7,171	14,648	21,970	21,412
Total of Ireland	547,827	245,875	33,221	107,492	161,239	130,241

The number of reservists who rejoined the colours from the Dublin Metropolitan police area cannot be ascertained, but it

must be added to the number of men who have joined the forces, and a proportionate deduction made from the number available.

NATIONAL INDEPENDENCE IN TRADE.

BY EDWIN E. SLOSSON, M.S., PH.D.

The following article was originally written by Dr. Slosson for the National Institute of Efficiency, and was prepared especially for American readers. But we, too, can learn lessons from the shrewd and well-thought-out comparisons he makes between German, British and American methods. In his admirable paper, which lack of space alone prevents our giving in full, Dr. Slosson displays a thorough knowledge of his subject, and an admirable ability to pass that knowledge on to his readers in a lucid and easily understandable way. Dr. Slosson, who visited Australia some years ago, is literary editor of the "Independent," and a writer of high standing in the United States.

The chief lesson of the Great War has been the demonstration of the importance of a nation's being able to stand on its own feet. Unless a country can produce within its own territory everything needed by this complex civilisation of ours it is sure to suffer for it somehow, and the lack may prove fatal in case of an emergency like the present. As the old saying has it: "For want of a nail the shoe was lost; for want of a shoe the horse was lost; for want of a horse the rider was lost; for want of a rider the battle was lost, and so the kingdom fell." During the last two years thousands of lives have been sacrificed on one side or another because of a shortage of copper or zinc, of cotton or rubber, of milk or petrol, of nitre or quinine, of khaki dye or optical glass.

But the dependence that is fatal to a country in war may be injurious to it in peace. The war revealed to the United States as it has to the belligerent nations that some of its leading industries had been built up upon foreign foundations. Of course we hope that such an emergency as this will never come again. At least we trust that wars will be so rare that it will not be necessary for a country to be kept so self-contained as to be ready to stand a siege at any moment. But if we suffer a foreign country to secure a monopoly of any of the necessities of life we are likely to pay that nation a yearly tribute, which in the long run will amount to more than a war indemnity. It may not pay us to make all the dyes or grow all the rubber that we need, but we cannot afford to be altogether without dye factories and rubber plantations as a protection against foreign extortion. All of the Allied Powers in conference at Paris decided that they would never again become the commercial dependents of Germany. Since it is evident that

the lines of nationality are to be drawn strictly in the future we should take account of stock to see how far we are from being and how near we may become free and independent States.

The present situation was foretold in 1902 by ex-Secretary Olney in his address at the banquet given in Boston to Prince Henry, whom the Kaiser had sent as a commercial envoy to the United States. In reference to the entrance of America into the international competition for the world's markets, Mr. Olney spoke with remarkable frankness and almost prophetic insight:

We are now entering upon a contest for industrial supremacy, the most intense and arduous the world has ever seen. Fortunate will it be if this contest does not, like so many others, degenerate into grim-visaged war with all its unutterable brutalities and horrors.

Mr. Olney's fears have been realised in a more terrible way than he could have imagined. The struggle for the commercial supremacy among the European Powers increased in intensity until it culminated in a war that has involved almost the whole world with the exception of the American republics. And after the war is over, there is every indication that the commercial rivalry will be resumed with greater earnestness and more bitter feeling than ever before. All of the warring nations have learned lessons of economy and self-sufficiency, and they are now organising in two great groups with the object of trade warfare. The eight Allied Powers represented at the Paris Conference in June, 1916, adopted a policy of mutual support and of antagonism to the Central Powers that is to continue for an indefinite period after peace is declared. According to this agreement all trade with Germany and her Allies and with their subjects resident in neutral countries is prohibited during the war, and they

will not be allowed after the war to receive the treatment accorded to the "most favoured nation." German products are either to be excluded altogether from the markets of the Allies or to be subjected to special restrictions.

An authoritative explanation of the meaning of these measures is to be found in the speech of Walter Runciman, President of the British Board of Trade, before the House of Commons, in which he said :—

We are, in fact, mobilising for Imperial purposes and for the purposes of the Allies the whole economic strength of the British Empire. . . . Never again shall subsidised foreign liners be permitted to run into British ports as freely as British ships. . . . We must see to it that, having ended this war victoriously, we do not give Germany a chance for reconstructing her economic machinery. . . . Commercially, Germany is a beaten nation. . . . The real trouble is that, when the war comes to an end, having been beaten at sea, and, we hope, on shore also, Germany will wish to embark on a new economic campaign. It will be necessary for us in making peace to see to it that Germany does not again raise her head.

The most important clause in the decisions of the Paris Economic Conference is its "declaration of independence," which reads as follows :—

The Allies decide to take the necessary steps without delay to render themselves independent of the enemy countries in so far as regards the raw materials and manufactured articles essential to the normal development of their economic activities. These measures should be directed to assuring the independence of the Allies, not only so far as concerns their sources of supply, but also as regards their financial, commercial, and maritime organisation.

This economic independence which the Allies are now planning for has been accomplished for Germany by force of the Allies blockade. Never before was a great commercial nation put to such a strain. In Germany were some sixty-six million people, of whom at least a fifth were supported by foreign commerce and fed by foreign food. Suddenly, and without time for readjustment, they were cut off from the outside world, together with Austria-Hungary, and compelled to rely upon their own resources. For more than two years the interned nations have proved capable of supporting themselves and carrying on a war against superior numbers attacking on all sides. Having proved the possibility of self-sufficiency, as much probably to the surprise of themselves as to that of their enemies, they are now considering the possibility of con-

tinuing the policy after the war and never again becoming dependent for their existence and prosperity upon the outside world.

The most definite and concrete exposition of this policy is to be found in Naumann's *Mitteleuropa*, which has had an immense sale in Germany and has now been translated into English. Dr. Friedrich Naumann is an original genius, a political party all by himself. While a Protestant pastor he became interested in the constructive side of socialism, developed a system of Christian Socialism of his own and founded the radical weekly, *Die Hilfe* ("The Help"). His ideal is the union of Germany, Austria-Hungary, and perhaps Bulgaria, or other States, to form an independent economic unit. This mid-Europe or Central Europe or Centralia, or whatever it may be called, would include a great variety of races and religions and almost all of the natural resources necessary for industry. It could utilise for the common good the best elements of its constituents.

Naumann finds that the unique strength of Germany lies mainly in the following factors : an incorruptible and efficient body of administrators, the Prussian bureaucracy ; a well-organised and disciplined army of working-men, the Social Democracy ; an unequalled number of scientists and technicians ; and an exceptionally able group of financiers and organisers of large scale industry, such as the Essen Steel Works and the Hamburg-American steamship line. Now the war has shown that these elements, formerly antagonistic, can work together for the common good, and he proposes that they continue after the war, giving the German genius for organisation greater scope than it has ever had. Naumann cares little for dynasties or political divisions. These would sink naturally into insignificance in the face of such a union of industrial forces. In his "Central Europe" there would be no waste and no want ; there would be no one idle or out of work, no one lacking food or medical care.

This is the vision of a poet and a reformer ; but Germany had gone a good way toward realising his ideal before the war, and still farther since, so it is safe to prophesy continued advance in this direction. The ambitions of the Allies have not yet been put into so concrete a form as in this volume, but the resolutions of the Paris Conference point toward a similar development. Evidently, then, there will be after the war two great antagonistic groups of commercial power, in both of which the

means of production and distribution will be more efficiently organised than ever before. The United States will be outside either group, and will have to meet their competition alone unless it unites with the southern republics or other neutral nations to form a third trade group. But what chance will the United States stand against nations organised for efficiency if it sticks to its present policy of breaking up business into warring units, keeping trade unions separate, allowing railroad employers and employees to settle their disputes by seeing which is in a position to hurt the public most, and leaving every man to find a job if he can and get what he can out of it? In the internal organisation of offices and factories Americans have done wonders, but the relations between different offices and factories have been left to chance and greed. A dis-organised America will be no match for an organised Europe either in peace or in war.

In considering the possibility of combining commercial expansion with economic independence for the United States it is most important to study Germany, since she had in the years preceding the war made a more rapid advance in foreign trade than any other nation, and at the same time had maintained her self-sufficiency, as her endurance of this two-year siege proves. It is, therefore, to Germany that I shall here chiefly refer.

It was at our Centennial in 1876 that German manufacturers were first brought to our notice. The impression they made was not favourable, and the Germans themselves acknowledged that there was a reason, for the articles in general were *schlecht und billig*. The British translated this into their own vernacular as "cheap and nasty," and they assumed, quite too hastily, that these adjectives would always be applicable to German products. They still complain of the low prices charged by their German rivals, but they no longer decry their appearance.

But while they were labouring under their original delusion that German goods were necessarily inferior and that nobody would knowingly buy them, the British manufacturers got Parliament to pass a law requiring all German products to be so branded. This legislation proved a boomerang. The British public showed an unpatriotic preference for the foreign product, and the label, "Made in Germany," came to be a distinction rather than a reproach. As the crowning insult there steamed into Southampton one fine day an ocean liner, larger,

faster and handsomer than anything the British shipyards had turned out, and strung along its side hung a banner with the strange device, "Made in Germany." Then there was a clamour for the repeal of the Act, even for the prohibition instead of the compulsory use of the label, and, if we may believe their commercial rivals, certain unscrupulous British firms took to branding their own goods "Made in Germany" in order to make them more saleable to Englishmen at home and over seas. The German commercial invasion gave rise to a movement for a protective tariff in the United Kingdom, but this had not before the war gathered sufficient strength to overcome the traditional free-trade sentiment. The self-governing dominions, Canada, Australia and New Zealand, out of loyalty to the mother country, granted differential duties in favour of British products; still, the importations from Germany have increased much more rapidly than from the United Kingdom; in spite of this handicap.

The war, however, has at last given the distressed British manufacturer the chance he has been longing for, and he is certainly making the most of it. He realises that he can do more than the British soldier to destroy the power of Germany, and his patriotism inspires him to greater exertions than he has hitherto made at the instigation of self-interest alone. To kill off a half a million of her soldiers will not permanently disable Germany, because her natural increase in population is nearly a million a year. But to destroy her foreign commerce will deprive twenty millions of their living. The Krupp machinery is more dreaded in England than the Krupp guns. As long as the war lasts and Britannia rules the wave, German competition can be eliminated, but peace must come sometime, and unless the British manufacturer can by then get a firm hold of the markets of the empire and of the world outside, the competition will begin again, and perhaps with the same result. To forestall this twenty-five organisations have been formed in England for the purpose of promoting British commerce and boycotting German goods. The Anti-German League claims a million members.

The determination of the English to take advantage of this opportunity to recover their commercial prestige and to develop their manufactures so as to be independent of any other nation is shown by the following passage, which I quote from an article, "The Campaign Against German Trade," in *The Fortnightly Review* of November,

1914, by W. H. Dawson, whose "Evolution of Modern Germany" is one of the best books we have on German industrial expansion :—

Now, in a most unexpected way, the chance of a century has come to us, for whatever the political results of the war may be, the economic results for ourselves may prove immensely advantageous. For the country which has so long been menacing our industry and commerce has suddenly become a country with which for the time being we may not trade, even if we would ; its industries are paralysed ; its argosies have been swept from the seas ; and most of the markets in which its greatest conquests had been achieved are open to us as never before. To improve the opportunities thus offered is the great task and duty of the hour, and upon the vigour, intelligence, and foresight shown by our manufacturers and traders at the time of supreme test will the future course of our economic development and prosperity for generations depend.

British manufacturers are now fully awake to the disadvantages of their former individualistic and competitive methods of production, and in July, 1916, they formed a Federation of British Industries, representing a trade capital of £500,000,000, for the purpose of co-operation with one another, with labour and with the Government for the expansion of British commerce. The British shipping and colliery interests have formed a combine with £100,000,000 capital.

We may expect to see, as a result of the war, the formation of some sort of customs union comprising the whole British Empire, and perhaps also one including its present Allies.

In order to replace German goods the British manufacturer needs first to know what they are. Accordingly, British agents all over the world have been requested to send in the articles "made in Germany" which have the greatest sale in their respective localities. These are put on exhibition in the cities of the United Kingdom so that the manufacturers may examine and imitate them as nearly as possible. A still more valuable aid to British industry is the act of Parliament passed soon after the declaration of war, authorising English firms to take over German patents and trademarks.

They, however, will not be able to supply their own needs or ours for some time to come, for the whole world has come to be dependent upon Germany for the complex organic compounds used in dyeing and medicine. The investigators of the British Government found that industries which

employed a million and a-half men and produced annually goods worth a billion dollars were dependent upon aniline dyes, nine-tenths of which were imported, mostly from Germany.

In 1906 England celebrated a melancholy anniversary, that of a discovery made fifty years before by an Englishman, which had added hundreds of millions of dollars to the world's wealth, but of which Germany had reaped most of the profit. W. H. Perkin, working in the London laboratory of the German chemist, Hofmann, happened, while endeavouring to make quinine artificially, to hit upon the first aniline dye. The English at that time led the world in the chemical products and might easily have exploited this new field, but to do so required an application of science to industry, which the English were then incapable of making. The English universities frowned upon scientific research, and the English manufacturers turned a cold shoulder toward the man from the laboratory. The German universities, on the contrary, graduated trained chemists, and the German manufacturers established research laboratories for them. There are now about two thousand artificial dyestuffs known, and nine-tenths of them bear the label, "Made in Germany."

In the perpetual warfare between the farmers and the chemists which is now being waged in the fields of medicine, dyes, textiles, flavours, perfumes and foods, the chemists are bound to win in the long run, in spite of the fact that the farmers, by their command of more votes, are usually able to invoke the arm of the law in their behalf. How greatly the world gains by the triumph of chemistry over agriculture may be seen by the example of that most favoured of flavours, the extract of vanilla. In 1876 its essential principle, vanillin, cost £360 a pound. Now it is sold for 32s. Coal tar, which, when I was a boy, was mostly used for roofing barns and celebrating election returns, has since added hundreds of millions of pounds to the world's wealth. The discovery of how to make alizarin from coal tar instead of from the madder root means a saving of £4,000,000 a year.

The progress of industrial chemistry has been so rapid that its importance is not generally realised, yet it is one of the great prizes at stake in the present war. In 1913, Germany exported dyes to the value of £11,000,000, and other chemicals to the value of £16,200,000. A single submarine,

the *Deutschland*, was able to bring over a million dollars' worth of dyes, medicines and photographic chemicals, for they sold in some cases at a hundred times their ante-bellum prices. In 1897, Germany imported £640,000 worth of indigo. In 1912, Germany exported £2,240,000 worth of indigo. The product was substantially the same, but in the first case it came from the farm, and in the second from the laboratory. The change of the current of trade in Germany's favour was due solely to invention of the method of making indigo artificially. I say invention, not discovery, because there was nothing accidental about it. The *Badische Anilin und Soda Fabrik* kept their large corps of chemists at work on the problem year after year until they had worked it out. It cost the company four million dollars before they got any returns, but it paid them. The German chemical factories before the war paid an average dividend of nearly 22 per cent. annually. Whenever—and not before—the American and English manufacturers have sufficient faith in scientific research to plan and support a systematic campaign on this scale, they may gain a similar success in some of the many fields, equally profitable, still awaiting development. In 1897, the indigo crop brought in £4,000,000 a year, largely going to British India. The value of the output is now about a quarter of this, because of the competition of the synthetic product, which is cheaper and purer, and it seems likely that the indigo plant will eventually join the madder plant in the limbo of forgotten things.

The rubber tree is also on trial, for synthetic caoutchouc has been made both in England and Germany, and it only remains to be seen whether a raw material can be found cheap enough to compete with the cultivated product. But whether the rubber of the future be natural or artificial, America is equally "out of it." For we have neither the plantations nor the laboratories capable of producing it, and so have to pay tribute to those countries which have had more forethought. It has long been evident that the wild trees of the African and South American forests could never meet the new and enormous demand for rubber. The lash fell more heavily on the backs of the natives of Belgian Congo and Putumayo, but it only drew forth blood instead of the desired increase in the flow of the latex. So the English and Germans, foreseeing the famine, began to prepare for it by planting rubber trees in their tropical

possessions. This was some twenty years ago, and now Great Britain has 1,345,000 acres of rubber plantations. The United States, which uses more than half the world's output of rubber, is practically producing none, although we have good land for it in the Philippines, Hawaii and Porto Rico. Besides our own colonies, Mexico, Central America and the West Indies would have welcomed the American planter.

In 1915 the British colonies produced 100,000 tons of rubber mostly cultivated, and the acquisition of Togo, Kamerun and Kaiser Wilhelm's Land gives Great Britain command of the German sources of supply.

One other tropical product must be mentioned in this connection, and that is the meat of the cocoanut, known in commerce as copra. This was once thought only fit for soap fat, but the chemist with the aid of a catalytic agent succeeded in transforming the evil-smelling oil into a solid white and wholesome fat, and it has become one of the chief ingredients in margarine and other substitutes for butter and lard in cooking and table use. This simple chemical reaction, which any schoolboy—of the Macaulay calibre—could write upon the blackboard, has been worth hundreds of millions to Europe. Germany has been paying out £8,000,000 a year for copra, and it was sold for a great deal more. The margarine industry has developed to immense proportions in the United Kingdom, but still it does not suffice for the needs of the people of these islands, and they had to import before the war 150,000,000 pounds of margarine a year, chiefly from Germany and Denmark. This amounts to more than a third of the butter imports. I am no believer in the theory of vegetarianism, but it seems to me that the substitution of the vegetable fats and oils for those of animal origin, in part or in whole, is to be encouraged for reasons of both economy and health. Certainly the factory is easier to keep under sanitary control than the farm-yard.

As civilisation advances and population becomes more dense, the inhabitants of temperate zones become necessarily more dependent on the tropics. Where the sunshine falls straightest and the rain falls heaviest there the food of the future will be produced. In the various lists that have been prepared to show the increase in the cost of living, two items stand out conspicuously, for they are usually the only foods which have not risen in price. These are sugar

and bananas, both tropical carbohydrates. No nation can call itself independent unless it has command of the seven C's: coffee, cacao, copra, cotton, cane and caoutchouc.

Germany, France and the United Kingdom are destitute of all these requisites of modern civilisation, and it is chiefly their struggle for territories where tropical and semi-tropical products could be grown that has involved them in war.

When some scientific Creasy comes to write a book on the really "decisive battles of the world" he will count among them that recorded in the private papers of Napoleon as:—

This day the emperor granted two thousand livres from his private purse to investigate the possibility of making sugar from the beet root. Thus France may escape the heavy tribute she is yearly forced to pay to foreigners.

That act did more than any of his other efforts to accomplish his dearest dream, the overthrow of the sea power of England. It did not weaken that sea power, but it rendered it partially powerless. What did it matter that Britannia ruled the waves if France could grow her sugar on her own soil? What did it matter that in the battle fought in the strait between Dominica and Guadeloupe on April 12, 1782, Rodney beat De Grasse? Napoleon's little flier in applied chemistry robbed the British victory of its sweetness. The French lost the West Indies, but the West Indies lost their value. Plantations went back to the bush, and fine old colonial mansions sank into decay. The islands became visibly blacker year by year as the percentage of sugar in the beet increased.

Starting with what seemed a hopeless handicap, a bare six per cent. of sugar to the cane's twelve, the beet gained steadily upon its tropical rival. Within fifty years the sugar beet had caught up with the cane; then it forged ahead, fourteen, sixteen, eighteen per cent., and by the end of the century had scored a record of twenty, all through its rigorous course of eugenics. The American farmer who buys a sack of sugar beet seed marked "Made in Germany" knows that every one of the little brown seeds has a certified pedigree of a hundred generations in which not one ancestor has fallen below the high standard of quality. This is more than can be claimed by the House of Lords or any other hereditary aristocracy.

What Napoleon called a "heavy tribute" for France was nothing to what Eng-

land was then "forced to pay to foreigners." By 1914 she was sending £37,000,000 a year out of the country to pay for sugar, and a third of it went to Germany, where it helped to build up the German Navy which was preparing to challenge her supremacy of the seas. And now, when the Germans can no longer sell their surplus sugar to England, they turn it into alcohol and use it for running armoured autos and manufacturing high explosives. To-day the world gets 6,300,000 tons of sugar from beets in comparison with 8,400,000 from cane.

The electrical industry has, like the chemical, been from the start under the control of scientific men, so here again the Germans have had the advantage and made the most of it. In 1913, the German exports of dynamos, motors, lamps, and other electrical appliances amounted to £8,000,000, while the exports of Great Britain in this line were only £2,000,000. The United States sends out of the country annually £6,000,000 for nitrogen compounds. Yet there is just as much nitrogen free in the air here as in Germany, which, though cut off from Chile, is still using up nitrogenous explosives at a terrible rate.

The London *Times* estimates the prize of German trade, which it is striving to capture, amounts to £20,000,000 a year for machinery alone, and reminds its readers that Great Britain owes in large part her economic supremacy of the world to taking advantage of two similar opportunities, one in 1814, when Europe was ravaged by the Napoleonic war, and again in 1870, when France was crushed and the United States was slowly recovering from the effects of the Civil War.

It will be seen that the Germans have made their greatest gains in those industries where knowledge and skill count for most. If this proved the possession of superior brain power there would be nothing for us to do except to become resigned to our permanent state of congenital inferiority. But there is no reason to think that the modern Germans are superior in natural ability to other nations or to their ancestors of the days when Germany counted for little in the commercial world. Their advantage lies in the fact that they are better educated. This is true whichever end of the educational system we consider. More of them can read and write. More of them have received the highest technical training, fitting them for the advancement of science or commerce. The percentage of illiteracy

among the young men entering the army is .02 per cent. Among the corresponding class in the United Kingdom the percentage of illiteracy is 70 times as great, in France 165 times, in the United States 190, in Belgium 425, and in Russia 3000 times as great as in Germany. This handicap of ignorance becomes increasingly burdensome to a nation as it enters the more technical field of modern industry.

More new books are published in Germany every year than in Great Britain, France and the United States all three together. And if we go by substance instead of by numbers the Germans are much farther in the lead. I am not here venturing an opinion on the vexed question of relative literary merit or frequency of original genius. But if we cut out from the book lists fiction and all literature of a frivolous character and consider only those books which contribute directly to national efficiency by giving information about the past and present of the world we live in, we shall find that the German has a much better chance to get such knowledge than the reader of any other language.

So much has been said about the superior efficiency of the German school system that it is not necessary to consider it here. The adoption in Germany of the metric system and simplified spelling means a saving of time and mental tissue comparable to throwing out the spelling book and compound numbers from our schools, and a gain in efficiency throughout life. It is lucky for the rest of the world that the Germans still stick to their cumbrous grammatical forms and Gothic type.

We have heard a great deal about the marvellous efficiency of the German spies in collecting information about the countries likely to be invaded by German armies. But the German trade strategy is based upon an intelligence service quite as efficient, and this we can imitate with a clear conscience. Here again we find that close co-operation between government, education and industry which is so characteristic of Germany and so strange to us. It is no exaggeration to say that German commercial leaders have more accurate information about the natural resources and trade possibilities of many a country than its own rulers. The representatives of Germany abroad are on the lookout for new openings for German products. Every German consul is a university man and has had besides four years of special training in international law, languages and business.

One other factor in the German industrial system must be mentioned, because it is one of the most important, although there is no space here to discuss it, that is, the protection of the workingman. The system of state or municipal insurance against accident, old age, disability, and even unemployment, and the constant effort to prevent men being thrown out of their jobs by the extinction of an industry, give a sense of security that greatly increases industrial efficiency. The evils of unemployment and vagrancy, which are serious in Great Britain and are becoming so in America, have been alleviated, if not removed, in Germany.

We now call the Germans wasteful of human life, and we are right. They used to call us so, and they were not wrong. When the Prussian Minister of Commerce visited the United States some years ago he reported that we were "very careless about the life and health of the working classes; in the largest works the precautions against accident are of the most primitive kind." We must remember that the reason why the German Government is now able to sacrifice men and money so lavishly in war is because this same Government has for fifty years devoted itself so assiduously to the upbuilding of a rich and populous nation. A country much smaller than Texas and with few natural advantages has been brought into the foremost rank of world powers in commerce and industry, in science and arts.

The nearest we can come to a solution of the paradox of Germany is to say that it is a medieval system energised by modern science. It is the best example of the application to a state of what business men nowadays call "scientific management" that the world has so far seen. Yet indistinguishably entangled with this political efficiency are vestiges of antiquated institutions which we Americans regard as irrational and tyrannical.

As the result of scientific management applied to manufacture, salesmanship and administration, Germany has made greater proportionate gains in wealth than any other country except the United States. But while the wealth of the United States has come largely from the exploitation of natural resources, such as the mines, oil deposits and the fertility of the virgin soil, the Germans have made their gains largely by the importation of raw material and exportation of finished products. In other words, the chief commodity they have been exporting

is the intangible and inexhaustible output of their brains. The Germans are still a poor people compared with the English, French, Americans or Belgians, but they were rapidly catching up.

To avoid misconceptions I must remind the reader that the purpose of this paper is merely to point out some of the elements of German success in business. I have not attempted to compare the civilisation of Germany as a whole with that of any other country, nor to balance its merits and defects.

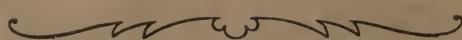
When we come to the question of whether we can adopt German methods to advantage we are struck by the curious fact that the prosperity of Germany has been built up on principles in many respects quite the opposite of those generally held with us. For instance, the American Government intervenes in business to prevent combination and restore competition. The German Government intervenes to prevent competition and restore combination. Even the Labour men and Socialists of Germany favour the formation of syndicates because it makes the conditions of employment more stable and increases wages and number of men employed through expanding the industry. The industries which have made most progress in Germany have been those most completely syndicated, like the steel, potash, dyes and glass business. But the form of combination favoured in Germany is not the American trust, but the cartel, which is essentially a marketing syndicate, regulating prices, output and share of production. The cartel does not destroy or absorb small producers, but, on the contrary, enables them to survive by protecting them from the competition of the big ones.

In America protective duties are attacked on the ground that they favour the formation of trusts. In Germany they are advocated for that same reason. Our Government prohibits railroad rebates in behalf of special industries. The German Government grants rebates or manipulates freight rates on the State railroads to help industries that are endangered or are ambitious of foreign expansion. In this country it is regarded as an unanswerable argument against the tariff if it is discovered that a protected article is sold cheaper abroad. In Germany duties are imposed with the

express purpose of enabling the manufacturer to sell cheaper abroad. In this country it is considered an absurdity, if not a crime, to maintain a duty on a product, especially agricultural, which can never hope to be produced as cheaply as it can be imported. In Germany it is regarded as the duty of the Government to permanently protect an industry like agriculture, which is necessary for the economic independence of the State. In America it is thought desirable that the different branches of an industry be kept in separate hands. In Germany it is thought desirable that each industry should control all its sources of raw material and turn out a completely finished product; for instance, that a steel plant should own its own iron mines, coal mines, railroads and ships. Our cities are ruled strictly and in detail by the State; the German cities are self-managed and branch out into many enterprises considered improper in America. In Germany office-holding is a life job for which a man receives professional training; we regard administration as an occupation for amateurs, and believe in rotation in office.

Americans think it wrong for any department of the Government to make a profit. The German Empire gets over thirty per cent. of its income from its remunerative enterprises, and the annual gross receipts of Empire and States from such sources are £140,000,000. In America the combination of railroads and steamship lines is forbidden; in Germany it is encouraged. The German Government is the partner and promoter of German business; the American Government aims rather to regulate, to correct and to chastise. In short, the German strives for organisation; the American for disorganisation. The German ideal is co-operation; the American is competition. The Germans believe that competition is a sort of industrial warfare, and as such should give place to a permanent peace.

Because Germany has prospered by acting upon these principles, it does not of course follow that we should repudiate our own. But it seems that our traditional views and practices cannot have the universal validity we customarily ascribe to them when we find success achieved by pursuing courses quite the opposite.



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FINANCIAL AND BUSINESS QUARTER.

In STEAD'S REVIEW of 7th October last, mention was made of the unsatisfactory quality of goods received in the Commonwealth from Japan, numerous complaints having been made as to the failure of consignments to come up to sample. The irregularity was admitted with certain reservations in Japanese commercial circles, and an Economic Commission recommended the establishment of "conditioning houses" for the "inspection or sampling of all goods intended for export abroad, and the prevention of shipment of such articles as are of inferior quality." Probably as a result of the work of the "houses" mentioned, the standard of quality observed by shippers of late is stated to have approached more closely that of the sample, and exporters are said "to be hopeful of regaining the good graces of Australian importers by a strict adherence to the terms and conditions of contracts which they accept." A new trouble has, however, now faced the Japanese exporter. It has been discovered that the "wily Chinee" has been attaching the trade mark of established Japanese exporters to inferior articles produced in China. A protest was made to the Chinese Government, but the authorities refused to interfere, and the Chinese merchant blandly says "No savee"; and at the same time endeavours to outwit the measures taken by the Japanese to circumvent him.

* * *

Similar to the experience of America, the unprecedented trade boom in Japan and the consequential inpouring of gold has proved somewhat embarrassing to our Eastern friends, and has created intricate problems for the Japanese financiers to grapple with. Always a very likely contingency with so much easy money available, there is said to be a strong tendency in Japan to recklessness. During 1916 3085 new companies, with a paid-up capital of £8,153,957, have been organised, representing an increase of £2,800,000 over the previous year. The capacity of the shipbuilding yards of Japan have increased fivefold since the outbreak of the war, and during the same period foreign Governments have chartered over 400,000

tons of Japanese shipping, ensuring rich profits for the shipowner. Exactly what to do to make the best use of their sudden accession of wealth, is the question now engaging the earnest attention of those in authority in Japan. The country's specie reserve is being augmented at a remarkable rate, and towards the close of last year was estimated at about £67,000,000. According to the *Economist*, there is some talk of persuading Great Britain to raise a 50 or 100 million yen loan in Japan, while others advocate the organisation of a great financial corporation for the purpose of promoting investment abroad.

* * *

It is stated that since the outbreak of the war Japan has spent about £13,000,000 in the repayment of foreign loans, while £20,000,000 has been invested in foreign enterprise abroad through Government channels, and there has been a good deal devoted to private investment and debt redemption as well. At the beginning of the war the total volume of currency was £29,000,000, but notes issued by the Bank of Japan have now risen above £42,000,000, which, owing to the slow rate of placing capital, is lending further impetus to wild speculation. The sobriquet, "the poor farmer," would appear to aptly describe the tiller of the soil in Japan, as it is averred that the Japanese farmers owe the enormous sum of £160,000,000, exclusive of debts not duly registered, for which they have to pay £32,800,000 in interest every year, or about 16.4 per cent. per annum! It has been urged that some of the present increase of specie should be utilised in assisting the agricultural classes to redeem their loans by accommodating them with funds at 7 or 8 per cent. interest, thus saving them about £16,800,000 yearly.

* * *

The war has undeniably demonstrated the fact that in view of her geographical position and the extent and variety of her resources, Canada must, ere long, play an important part (perhaps the most important as far as the colonies are concerned) in the development of the British Empire. For that reason alone, any information regard-

ing the Dominion is of more than passing interest at the moment. An illuminating statement with reference to the amount of "outside" capital invested in Canada was recently made by the British Trade Correspondent at Toronto. That official pointed out that most of the capital came from Great Britain and the United States, and might be roughly divided into two classes—money invested in Government, municipal, railway and industrial securities by capitalists of Great Britain, and money invested by Americans in industrial enterprises.

* * *

The big flow of British capital commenced in 1905, and reached its high-water mark in 1914, and at the present time the amount invested was approximately £304,070,000. American capital invested was roughly £127,380,000, to which should be added about £64,000,000 invested in Government and corporation securities. Since the outbreak of the war the bulk of Canadian securities had been marketed in the States. The investments of other countries in Canadian securities were, approximately—France, £20,000,000; Belgium, £2,000,000; Germany, £6,000,000; Holland, £3,500,000; Russia, £400,000; Turkey, £600,000; foreign holdings of Canadian Bank stock £2,250,000. German capital had been mainly employed in the purchase of Canadian-Pacific railway stock.

* * *

Perhaps the most interesting feature of the fourth issue of the Commonwealth War Loan—which resulted in about £18,246,580 being subscribed, the total being still incomplete—was the large falling off in the number of subscribers as compared with the previous issue, when £23,587,420 was raised. For the four loan issues to date subscribers have numbered as follow:—First issue, 18,748; second, 28,937; third, 102,041; fourth, 44,397. To the first three issues, subscribers from Victoria outnumbered those from New South Wales, but on the last occasion the elder State turned the tables with 17,823 individual subscribers as against 15,208. The reason for the drop of over 100 per cent. in the number of subscribers can be traced pri-

marily to the fact that many thousands of working men with limited incomes were contributing to the third issue under the extended payment scheme, and as such payments will not be completed for a few months yet, the taking up of additional bonds under similar circumstances, in the new issue, would have entailed overlapping, and a rather serious strain upon the average wage-earner.

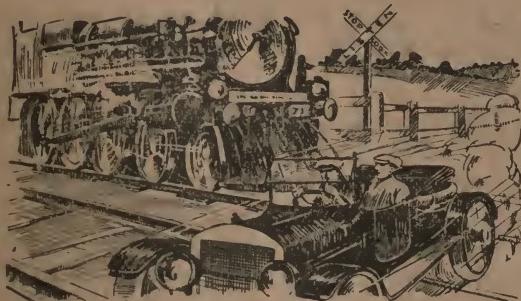
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The success of the issue of War-Savings Certificates in Great Britain has evidently inspired the Commonwealth authorities to adopt a similar method of obtaining much-needed capital from the poorer-paid classes. The British scheme has, however, been departed from in a few important details. In Britain the war savings of certificate holders will be retained for five years; in Australia for three years. The certificates will carry 5 per cent. interest in both cases, but the British certificate, having the advantage of being tax free, is worth 2 per cent. per annum more. The fact that in war loan stock interest only will be charged, whilst in connection with the certificates both principal and interest will be subject to taxation, is certain to raise some protest. Whilst the difference to individual certificate holders is likely to be infinitesimal, it appears on the face of it a tactical blunder upon the part of the authorities in making such a distinction between war loan bonds and stock and war-savings certificates. In Great Britain up to the beginning of December 50,339,925 certificates had been sold, a state of affairs mainly due to the activities of War Savings Associations which were formed throughout the Kingdom. It is tolerably certain that if the Australian issue is to be a success similar associations will need to be inaugurated here, and considerable energy displayed.

* * *

British Consols are now quoted at £51 $\frac{1}{2}$; British 3 $\frac{1}{2}$ per cent. War Loan stock at £84 $\frac{1}{2}$; 4 $\frac{1}{2}$ per cent. British War Loan at £99 $\frac{3}{4}$, and Commonwealth 4 $\frac{1}{2}$ per cent. War Loan at £98 12s. 6d. The present exchange value of the sovereign in New York is about 4.76 $\frac{3}{4}$, as against 4.866 $\frac{5}{8}$ normal.





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